

# **Chapter 5**

## **Consultation and Coordination**



In the fall of 2000, the Bureau of Land Management (BLM), Prineville District, reinitiated the Upper Deschutes Resource Management Plan (RMP) Environmental Impact Statement (formerly the Urban Interface EIS) in an effort to respond to growing concerns over the expanding and changing needs of the urban interface areas. The RMP will amend (update) needed sections of the Brothers/La Pine RMP and the Two Rivers RMP in response to changing issues identified through consultation and coordination with interested and affected groups and individuals. This chapter includes a brief description of the process used during the preparation of the Draft Environmental Impact Statement and Resource Management Plan to keep people informed about and involved in the decision process.

## Information Sharing

### Federal Register Notice

A Notice of Intent was published in the Federal Register in 1995. The announcement contained a request for comments and issues to be addressed in the RMP and concerns over managing public lands.

### Analysis of the Management Situation

In October 2001, the Analysis of the Management Situation (AMS) was published. The document identified preliminary issues based on internal meetings of BLM specialists and managers, meetings with tribal and local government representatives, calls and letters from the general public received over the previous ten years, and public scoping meetings conducted during earlier attempts to amend the existing RMP (for the "Central Oregon Urban Interface Plan Amendment"). Comments on the AMS served as a resource for members of the Issue Team during the collaborative process. The AMS also included an Issue Team Application and an invitation to participate in the collaborative planning process.

### Public Meetings & Field Trips

During the comment period for the AMS, public meetings were held in Redmond on October 16, 2001, in Prineville on October 17, 2001, and in La Pine on October 18, 2001. The BLM requested public comments on the AMS through announcements in local newspapers, and in the cover letter on the AMS (mailed to about 1,200 people in October 2001). The BLM also held public field trips to various sites of interest within the planning area. These field trips took place on October 20, 2001 in the area west of the Powell Butte Highway, on October 21, 2001 in the La Pine area and on October 27, 2001 in the area east of the Powell Butte Highway.

Throughout the planning process there have been frequent meetings open to the public and advertised through some of the techniques mentioned earlier, including radio and newspaper releases and updated on our Web Site.

### Web Site

A web site for the Upper Deschutes Resource Management Plan process has been maintained since publication of the AMS. The site includes periodic updates on plan progress, meeting dates, a link to information about issues and alternatives as they have developed, including maps and summaries, and an e-mail contact. It also includes a link to the AMS and associated maps and to the results of the social survey conducted by the

University of Oregon during the planning process. Issue Team and PAC meeting dates were also posted, as well as the telephone numbers of the BLM interdisciplinary team.

## Plan Updates

The agency also offered periodic plan updates that were posted to the website and mailed to all members of the UDRMP mailing list. News releases were broadcast on local television and/or radio stations, and placed in local newspapers.

# Collaborative Planning

## BLM Process

The proximity of BLM lands to local communities increases use demands and the need for partnerships and coordination to provide for multiple needs and reduce conflicts. Public and other government participation during this planning process occurred mainly in a community-based framework. This process included using focus groups chartered specifically for this process, as well as including other separate but related governmental collaborative processes like the South Redmond Collaborative Planning Group.

The collaborative process was designed to put governments and citizens together to resolve the significant planning issues. See Table 5-1 for a list of key public involvement events. The following groups contributed to the planning effort in a variety of ways:

**Intergovernmental Agency Representatives** – Includes federal, state, or local governmental partners that have overlapping or contiguous jurisdictions, or provided special information or expertise in the Draft Environmental Impact Statement.

**Deschutes Provincial Advisory Committee (PAC) & Subcommittee** – A committee formally chartered under the Federal Advisory Committee Act to provide a broad representation of interests to advise to federal land managers within the Province. A subcommittee of the full PAC was assigned to act on behalf of the full PAC during this process. The PAC recommended the BLM develop the range of alternatives that included Alternatives 1-7, and they go forward with consensus recommendations from the Issue Team. The PAC holds quarterly meetings open to the public. The PAC membership list can be found in Table 5-2

**Issue Teams** - Working groups chartered by the PAC to focus on specific planning issues. The Issue Team included representatives of the general public, specific interest groups, permit holders, other stakeholders, and intergovernmental representatives. Subcommittees of the Issue Team focused on clarifying issues and developing alternatives around specific issue categories. These teams met frequently to develop concepts around which the alternatives were designed. All Issue Team meetings were open to the public. The Issue Team membership list is in Table 5-3.

**Preferred Alternative Subcommittee** - After the descriptions of the range of alternatives were completed by the BLM, the Issue Team was reorganized to focus on evaluating the range of alternatives and developing areas of consensus on a preferred alternative. For that process, the Issue Teams arranged themselves into five smaller groups based on the interests they had identified early in the process. In some cases, they were similar teams to those organized around the issue categories. These teams rated and ranked the interest categories, rated the alternatives according to the categories, and selected a few members to act on their behalf to work on consensus on a Preferred Alternative. The results of

**Table 5-1. Key Public Involvement Events**

Date	Event summary
10/01	Analysis of the Management Situation published and mailed
10/16/01	Public meeting, Redmond
10/17/01	Public meeting, Prineville
10/18/01	Public meeting, La Pine
10/20/01	Public tour, area west of Powell Butte Highway
10/21/01	Public tour, La Pine area
10/27/01	Public tour, area east of Powell Butte Highway
1/12/01	All Issue Team meeting
4/11/01	Deschutes Province Advisory Committee (PAC) meeting
6/20/01	PAC meeting
9/21/01	PAC meeting
12/10/01	Issue Team meeting – Land Uses
12/10/01	Issue Team meeting – Recreation
12/11/01	Issue Team meeting – Land Ownership
12/11/01	Issue Team meeting – Ecosystem
12/14/01	Issue Team meeting – Transportation & Access
12/14/01	Issue Team meeting – Public Health & Safety
1/7/02	Issue Team meeting – Land Uses
1/7/02	Issue Team meeting – Transportation & Access
1/9/02	Issue Team meeting – Land Ownership
1/9/02	Issue Team meeting – Ecosystem
1/14/02	Issue Team meeting – Public Health & Safety
1/14/02	Issue Team meeting – Recreation
1/16/02	PAC meeting
1/17/02	Issue Team meeting – Archaeology
1/29/02	All Issue Team
1/31/02	Issue Team meeting – Ecosystem
2/1/02	Issue Team meeting – Land Ownership
2/4/02	Issue Team meeting – Transportation & Access
2/5/02	Issue Team meeting – Public Health & Safety
2/6/02	Issue Team meeting – Archaeology
2/11/02	Issue Team Meeting – Land Uses
2/13/02	Issue Team meeting – Social/Economics
2/25/02	Issue Team meeting – Transportation & Access
2/26/02	Issue Team meeting – Public Health & Safety
2/27/02	Issue Team meeting – Archaeology
3/1/02	Issue Team meeting – Ecosystem
3/6/02	Issue Team meeting – Archaeology
3/11/02	Issue Team Meeting – Land Uses
3/13/02	Issue Team meeting – Land Ownership
3/13/02	Issue Team meeting – Land Ownership
5/13/02	Issue Team Meeting – Land Uses
5/14/02	Issue Team meeting – Public Health & Safety
5/15/02	Issue Team meeting – Archaeology
5/16/02	Issue Team meeting – Recreation
5/17/02	Issue Team meeting – Public Health & Safety
5/17/02	Issue Team meeting – Social/Economics
5/20/02	Issue Team meeting – Ecosystem
5/21/02	Issue Team meeting – Transportation & Access
5/22/02	Issue Team meeting – Land Ownership
5/28/02	Issue Team Meeting – Land Uses

**Table 5-1. Key Public Involvement Events (continued)**

Date	Event summary
6/19/02	PAC meeting
6/21/02	All Issue Team meeting
9/11/02	PAC meeting
11/26/02	Issue Team meeting – Social/Economics
12/10/02	All Issue Team meeting
2/11/03	All Issue Team meeting
2/25/03	Preferred Alternative Subcommittee meeting
3/4/03	Preferred Alternative Subcommittee meeting
3/11/03	Preferred Alternative Subcommittee meeting
3/14/03	PAC meeting
3/17/03	Preferred Alternative Subcommittee meeting
3/20/03	Preferred Alternative Subcommittee meeting
4/1/03	All Issue Team meeting
6/11/03	PAC meeting
10/2003	Proposed RMP and DEIS published and mailed

**Table 5-2. Deschutes Provincial Advisory Committee (PAC); PAC subcommittee members have astrick by last name.**

Last name	First name	Interest	Organization
ACHTERMAN	GAIL	AT LARGE REPRESENTATIVE	DESCHUTES RESOURCE CONSERVANCY
ARDT*	GLEN	STATE AGENCY	OREGON DEPT OF FISH & WILDLIFE
BURLEY	CHUCK	FOREST PRODUCTS	BURLEY & ASSOCIATES, LLC
CARLSON	DENNIS	AT LARGE REPRESENTATIVE	HOOD RIVER COUNTY DEPT OF FORESTRY
CHAUDET*	MOLLIE	FEDERAL AGENCIES (BLM/USFS)	PROVINCE LIAISON
CORDOVA*	JERRY	FEDERAL AGENCY	US FISH & WILDLIFE SERVICE
ERICKSON	DAN	COUNTY GOVERNMENT	WASCO COUNTY
FOWLER	BRAD	FOREST PRODUCTS	FOWLER TIMBER COMPANY
GENTRY	DON	TRIBAL GOVERNMENT	KLAMATH TRIBE
GILL*	KENT	ENVIRONMENTAL	FRIENDS OF THE METOLIUS
HENRIKSON	GERALD	FEDERAL AGENCY	BUREAU OF INDIAN AFFAIRS
LAMB	BONNIE	STATE AGENCY	DEPT OF ENVIRONMENTAL QUALITY
LESLIE	DAVE	COUNTY GOVERNMENT	DESCHUTES COUNTY PLANNING DEPT
LILLEBO*	TIM	ENVIRONMENTAL	OREGON NATURAL RESOURCES COUNCIL
MCCLAIN	DAVE	MINERAL INDUSTRY	PRIVATE CONSULTANT
NELSEN	RICHARD	LIVESTOCK GRAZING ON FEDERAL LAND	RANCHER, BLM GRAZING PERMITTEE
OLIPHANT	DENNIS	RECREATION/TOURISM	SUN COUNTRY TOURS INC
PENHOLLOW*	CLAY	TRIBAL GOVERNMENT	CONFEDERATED TRIBES OF WARM SPRINGS RESERVATION
THOMAS*	SARAH	COUNTY GOVERNMENT	CROOK COUNTY REP.
TOWNE	ROBERT	FEDERAL AGENCY	BLM FIELD MANAGER
TWETEN	RANDY	FEDERAL AGENCY	NATIONAL MARINE FISHERIES SERVICE
WELDON	LESLIE A.C.	FEDERAL AGENCY	DESCHUTES NATIONAL FOREST
WICKMAN*	BOYD	USFS RESEARCH	PRINGLE FALLS EXPERIMENTAL FOREST

**Table 5-3. Issue Team Members, Past and Present**

Last name	First name	Organization	City
ANDERSON	JIM		SISTERS
ANGELL	JIM		BEND
ARDT	GLEN	OREGON DEPT OF FISH & WILDLIFE	BEND
BABB	GEOFF	NATURE CONSERVANCY OF OREGON	BEND
BELL	JEFF	USFS, Ochoco NF	
BERAUD	BOB	BONNEVILLE POWER ADMIN	PORTLAND
BIRD	SALLY	CONFEDERATED TRIBES OF WARM SPRINGS RESERVATION	WARM SPRINGS
BOYER	JEFF		BEND
BROWN	DICK	CITY OF PRINEVILLE	PRINEVILLE
BURLEY	CHUCK	BURLEY & ASSOCIATES, LLC	BEND
CARLSON	MERRIE SUE	GOVERNMENT OFFICE OF THE STATE OF OREGON	BEND
CARLSON	SCOTT	HOOKER CREEK COMPANIES, LLC	BEND
COOPER	SCOTT	CROOK COUNTY COURT	PRINEVILLE
CRUME	BUTCH		LA PINE
DAVIS	RANDALL	OREGON DEPT OF TRANSPORTATION	BEND
DAVISON	BOB	WILDLIFE MANAGEMENT INSTITUTE	BEND
DEBOODT	TIM	CROOK CO EXTENSION SERVICE	PRINEVILLE
DEVONEY	MARK	OREGON DEPT OF TRANSPORTATION	BEND
DUFOURD	JOANI	CENTRAL OR. MOTORCYCLE & ATV CLUB	BEND
ECCLES	TERRY	OREGON PARKS AND RECREATION	SALEM
FAULKNER	ED		PRINEVILLE
FENTY	BRENT	ONDA	BEND
FERRY	BRIAN	OREGON DEPARTMENT FISH & WILDLIFE	PRINEVILLE
FLOREY	KEN		BEND
FOCKLER	BILL	OREGON EQUESTRIAN TRAILS	BEND
FORBES	JOHN	LPPRD	LA PINE
FROST	RUSS	OREGON DEPT OF TRANSPORTATION	BEND
GILL	KENT	FRIENDS OF THE METOLIUS	CAMP SHERMAN
GRAVES	BOB		BEND
GRAVES	MIMI		BEND
GRAY	SUSAN	ASCO	BEND
HAMMER	KATIE	Central Oregon PARKS & REC DISTRICT	REDMOND
HARTWELL	RAY	DESCHUTES RESOURCE CONS.	BEND
HENSLEY	JIM	CROOK COUNTY UNDERSHERIFF	PRINEVILLE
HILDEBRANDT	JAMIE	ROCK SPRINGS GUEST RANCH	BEND
HILLER	DAVID		SISTERS
HINMAN	RICK	CENTRAL ELECTRIC COOP, INC	REDMOND
HOLMES	MATT	ONDA	BEND
HOLMQUIST	ANNE		REDMOND
HUNT	BRUCE	CENTRAL ELECTRIC COOPERATIVE	REDMOND
JININGS	JON	DEPT OF LAND CONSERVATION & DEV	BEND
JOHNSON	JERRY	OUR PUBLIC PROPERTIES	LA PINE
JOHNSON	LIBBY	DEPARTMENT OF ENERGY, BPA	THE DALLES
JORGENSEN	STEVE	DESCH. COUNTY COMMUNITY DEVEL.	BEND
KACHLEIN	BELINDA		BEND
KELLER	ALAN	CROOK COUNTY LANDFILL	PRINEVILLE
KIMBALL	KATE		BEND
LAMB	BONNIE	DEPT ENVIRONMENTAL QUALITY	BEND

**Table 5-3. Issue Team Members, Past and Present**

Last name	First name	Organization	City
LILLEBO	TIM	OREGON NATURAL RESOURCES COUNCIL	BEND
LONSDALE	SANDY	JUNIPER GROUP SIERRA CLUB	BEND
MALARKEY	DIDI		EUGENE
MCCAFFREY	BILL	OREGON MILITARY DEPARTMENT	BEND
MCCAULOU	SCOTT	DESCHUTES RESOURCE CONSERVANCY	BEND
MCMULLEN	CHAD	HOOVER CREEK	BEND
MCNIGHT	BRETT	DEPT. OF ENVIRONMENTAL QUALITY	BEND
MILLER	LARRY	OREGON PARKS & RECREATION DEPT	BEND
MILLER	RON		REDMOND
MORROW	CATHERINE	DESCHUTES COUNTY PLANNING DIVISION	BEND
NORTON	M L	CENTRAL ELECTRIC COOPERATIVE	REDMOND
OLIPHANT	DENNIS	SUN COUNTRY TOURS INC	BEND
PENHOLLOW	CARY	CENTRAL OR IRRIGATION DISTRICT	REDMOND
PENHOLLOW	CLAY	CONFED. TRIBES OF WARM SPRINGS RES.	WARM SPRINGS
PETERSON	BILL	USDA FOREST SERVICE, BEND/FORT ROCK	BEND
PEWITHER	JOHN	REDMOND PLANNING COMMISSION	REDMOND
PIEPER	BARBARA		SISTERS
PIEPER	DARRELL		SISTERS
PONTE	GEORGE	OREGON DEPARTMENT OF FORESTRY	PRINEVILLE
SAILORS	TAMMI	C.OR IRR. DIST	REDMOND
SCHLOER	WALT	USDA FOREST SERVICE, FORT ROCK	BEND
SCHONBORN	LYN		BEND
SCHONNEKER	CHUCK	NORTH UNIT IRRIGATION DISTRICT	MADRAS
SINGHOSE	SUSAN		BEND
SINGHOSE	WAYNE		BEND
STEWART	JON	DESCHUTES NATIONAL FOREST	BEND
STOUT	DOUG		BEND
STROME	DARSIE		BEND
SUTHERLAND	JO ANNE	CITY OF REDMOND	REDMOND
THOMAS	SARAH	CROOK COUNTY REP.	PRINEVILLE
THOMASBERG	PAUL		BEND
THORN	BRUCE	QUAIL VALLEY RANCH	SALEM
TOMJACK	TOM & MARY		BEND
TONSFELDT	WARD		BEND
TOWE	MARIE	Crooked River RANCH RIDERS CLUB	Crooked River RANCH
UNGER	ALAN	CITY OF REDMOND	REDMOND
VAN VLIET	ALAN	EAGLE CREST	REDMOND
WALLACE	KERRIE		POWELL BUTTE
WHIPPLE	BRIGETTE	CONFEDERATED TRIBES WARM SPRINGS	WARM SPRINGS
WICKMAN	BOYD		BEND
WINCH	MARTIN		BEND
WOLFENBARGER	BOB		LEBANON
WOOLLEY	LAREN	EMPIRE CORP PARK	BEND
YODER	KATY		BEND
YOUTIE	BERTA		PRINEVILLE
ZAKRAJSEK	LARRY	BUREAU OF RECLAMATION	BEND
ZELENKA	BILL	CROOK COUNTY PLANNING DEPARTMENT	PRINEVILLE



the subcommittee work were returned to the Issue Team. The larger group finalized the Preferred Alternative consensus recommendation that was forwarded to the PAC and subsequently to the BLM.

## Other Collaborative Processes

In addition to the process designed for the Upper Deschutes Resource Management Plan, the BLM also participates in other related interagency efforts to address community needs such as public land uses and ownership, transportation, and healthy watersheds. A brief summary of some of the more directly related on-going efforts and their relationship to this Resource Management Plan are described below.

### South Redmond Collaborative Planning Group

The Governor of Oregon sponsors a state-wide Community Solutions Team composed of various state agency representatives and charged with collaboratively solving problems of growth and development within the state between, state, and local governments. This team recognized the potential for problems associated with different, sometimes ambiguous, or conflicting missions of federal, state, and local governments related to the growth of Redmond. They pulled together representatives from the BLM, OMD, ODOT, DLCD, Deschutes County and the City to discuss the potential conflicts and demands and seek solutions that could, among other things, form the basis for some parts of the alternatives that would be evaluated by the BLM in the RMP. A key component of the collaboration process was the ability to combine evaluation and decision processes between agencies, thus saving substantial money, time, and resources needed to finalizing important regional growth and development decisions.

The South Redmond Collaborative Planning Group provided a forum for developing alternatives to resolve regional transportation issues between Bend and Redmond, around the Redmond Airport, and community needs for public lands adjacent to the City of Redmond. These components were, reviewed, and subsequently included in the range of alternatives and in the consensus recommendation on the Preferred Alternative. The Preferred Alternative and Draft Environmental Impact Statement will form the basis for the City and County to pursue a Regional Problem Solving Strategy to amend their Transportation System Plan.

### City of Redmond Urban Reserve Study

The City of Redmond is in the process of completing a 50-year urban reserve study to predict buildable lands needed to meet expected state requirements. The BLM is participating in this process and used early calculations of expected need to identify lands available for community expansion in several alternatives, including the Preferred.

Prineville Reservoir Resource Management Plan and State Park Master Plan  
The USDI Bureau of Reclamation and the Oregon Parks and Recreation Department have recently completed a management plan to guide recreation and the use of resources within the Prineville Reservoir area. This lies within the Planning Area, but is on land withdrawn from BLM jurisdiction. BLM representatives participated on the Ad Hoc Work Group and Technical Teams for the Prineville Reservoir EA, and representatives from the BOR also participated on the Issue Team during this process to ensure that the plans would match consistent management direction where necessary.

### Sub-basin and Water Quality Restoration Planning

BLM is participating in several newly begun or ongoing Deschutes basin evaluation efforts that have and will continue to contribute important information to the Resource

Management Plan. These include the joint Water Quality Restoration Project for the Upper and Little Deschutes sub-basins, and the Northwest Power Planning Council sub-basin planning process, and the in-stream flow assessment for the lower Crooked River. These are ongoing collaborations between government agencies like the Forest Service, BLM, and USGS, as well as between local non-profit organizations like the Upper Deschutes and Crooked River Watershed Councils, and the Deschutes Resources Conservancy.

## **Millican-West Butte Road**

Following passage of the Millican-West Butte Road legislation, Crook County began working on construction details, including final location and design, and completing a description of the kinds of environmental impacts associated with the project. The purpose of this is to ensure consistency with the legislation and assure that appropriate mitigation for wildlife species and recreational values are considered. The BLM will continue to provide support and information to that process as needed. Descriptions about changes to any resource conditions in the area as a result of the construction activities will be incorporated as necessary between the Draft and Final EIS.

# **Agencies and Organizations Consulted**

The Prineville District BLM mailed the public scoping packet (AMS) to approximately 1,200 agencies, organizations, and individuals. The “Summary of the AMS” was mailed to approximately the same number of recipients. The mailing list currently includes approximately 1,690 names of agencies, organizations and individuals to which this draft Upper Deschutes RMP / EIS was sent. The following lists are representative of the entities on the mailing list:

## **Elected Officials**

Bend City Council  
Crook County Representative  
Crook County Undersheriff  
Deschutes County Board of Commissioners  
Government Office of the State of Oregon  
Jefferson County Board of Commissioners  
Sisters City Council

## **Tribal Groups**

Burns Paiute Tribe  
Confederated Tribes of Warm Springs  
Klamath Tribes

## **Agencies**

Barlow / Bear Springs Ranger District  
Bonneville Power Administration  
Bureau of Reclamation  
Central Electric Cooperative  
Central Oregon Irrigation District  
Central Oregon Parks and Recreation District  
City of Prineville  
City of Redmond  
City of Redmond Planning Department  
Crook County Court

Crook County Extension Service  
Crook County Landfill  
Crook County Planning Department  
Department of Energy, BPA  
Department of Environmental Quality  
Department of Environmental Quality  
Department of Land and Conservation Development  
Deschutes County Community Development  
Deschutes County Planning Division  
Hood River County Forestry Department  
Hood River Ranger District  
Klamath County Extension Service  
Klamath County Planning Department  
National Marine Fisheries Service  
North Unit Irrigation District  
Oregon Department of Fish and Wildlife  
Oregon Department of Forestry  
Oregon Department of Transportation  
Oregon Division of State Lands  
Oregon Military Department  
Oregon Parks and Recreation  
State Historic Preservation Office  
USDA Fish and Wildlife Service  
USDA. Forest Service, Bend-Fort Rock Ranger District  
USDA Forest Service, Deschutes National Forest  
USDA Forest Service, Ochoco National Forest  
USDE Bonneville Power Administration - EWP  
Wasco County

## **Organizations/Businesses**

Archaeological Society of Central Oregon  
Burley & Associates, LLC  
Central Electric Co-op, Inc.  
Central Oregon Motorcycle and ATV Club  
Central Oregon Partnership  
Crooked River Ranch Riders Club  
Deschutes Resource Conservancy  
Eagle Crest  
Empire Corporation Park  
Fowler Timber  
Friends of the Metolius  
Hooker Creek Companies, LLC  
La Pine Parks and Recreation District  
Nature Conservancy of Oregon  
Oregon Equestrian Trails  
Oregon Natural Desert Association  
Oregon Natural Resources Council  
Our Public Properties  
Quail Valley Ranch  
Rock Springs Guest Ranch  
Sierra Club, Juniper Group  
Sun Country Tours, Inc.  
Wildlife Management Institute

## **Others**

Interested public not affiliated with an above-mentioned group  
Livestock grazing permittees  
Miscellaneous additional businesses  
Recreationists  
Special recreation permittees

## **Preparers**

The following table (Table 5-4) contains the primary members of the Prineville District Interdisciplinary Team who were responsible for the preparation of this document. Following the table are lists of other District and State Office personnel who assisted in the preparation and/or review of this document.

### **Other Prineville District BLM preparers/reviewers**

Barron Bail, District Manager  
Jennifer Collins, Writer/Editor  
James Grace, Computer Specialist  
Janet Hollister, Writer/Editor  
Lawrence MacDonald, Computer Specialist  
Jean Nelson-Dean, Prineville District Planning and Environmental Coordinator  
Berry Phelps, Recreation Planner  
William Pieratt, Noxious Weeds Specialist  
John Swanson, Rangeland Management Specialist  
Marcie Todd, Deschutes Resource Area Assistant Field Manager  
Robert Towne, Deschutes Resource Area Field Manager  
John Zancanella, Archaeologist

### **BLM State Office contributors/reviewers**

Mike Barnes, Realty Specialist  
George Buckner, Wildlife Biologist  
Robert DeViney, Chief of Realty/Records  
Leslie Frewing-Runyon, Western Oregon Planner  
Mike Hamel, Visual Information Specialist  
Richard Hanes, Archaeologist  
Nancy Ketrenos, Geologist  
Craig Mackinnon, Rangeland Mgmt. Specialist  
Rosemary Mazaika, Environmental Protection Specialist  
Cliff McClelland, Printing Specialist  
Christina Caswell McElroy, Regional Economist  
Jim Rounds, Cartographer  
Joan Seevers, Botanist  
Eric Stone, Planning and NEPA Specialist  
Ron Price, Outdoor Recreation Planner  
Dave Harmon, Forester/NLCS Coordinator  
Margaret Wolf, Outdoor Recreation Planner

**Table 5-4. Interdisciplinary Team for Upper Deschutes Resource Management Plan**

<b>Name and Title</b>	<b>Education</b>	<b>Experience</b>
<b>Keith Brown</b> <i>Outdoor Recreation Planner</i>	B.S. Natural Resource Economics, University of Vermont; M.S. Recreation Resources, Colorado State University	Prineville District Recreation Planner for past 2 years. Over 10 years seasonal recreation work experience in the non-profit, for-profit, and government sectors.
<b>Steve Castillo</b> <i>Forester</i>	B.S. Forest Management Oregon State University	U.S. Forest Service (1977-1992). BLM (1992-present). Current duties: All aspects of forest management with emphasis on ecosystem restoration, hazardous fuels treatment, and small diameter timber harvest.
<b>Mollie Chaudet</b> <i>Project Manager, Upper Deschutes RMP</i>	A.S., Forest Technology Central Oregon Community College.	Twenty years of experience with the Forest Service. Environmental Coordinator and National Environmental Analysis Instructor, 1990-present; Project Planner, 1982-1989. Timber Sale Preparation 1978-1981.
<b>Lisa Clark</b> <i>Writer/Editor</i>	M.F.S. Conservation Biology / Wildlife Ecology. Yale University. B.A. Journalism, minor: English University of Oregon.	13 years with BLM, in Fire Suppression/Rx Burning, Wildlife, Recreation, and Writing/Editing. Three years with the Forest Service as wildlife biologist and writer/editor. Other experience includes Adjunct Instructor, Univ. of Oregon, General Science Program (2000 - present).
<b>G. Scott Currie</b> <i>Recreation Planner</i>	M.L.A Landscape Architecture, Cal Poly Pomona B.S. Natural Resource Management, Cal Poly San Luis Obispo	Recreation planner for Prineville District BLM 1999 – present. 10 years experience as Landscape Architect/Recreation Planner with USFS and USDA-NRCS. 10 years experience as Landscape Architect/Recreation Planner with EDAP.
<b>William I. Dean</b> <i>Wildlife Biologist</i>	B.S. Wildlife Biology, Colorado State University Associate in Science, Finger Lakes Community College	Bureau of Land Management (1990-2003) Currently wildlife biologist for the Deschutes Resource Area.
<b>Jimmy Eisner</b> <i>Fisheries Biologist</i>	B.S. Fisheries, Humboldt State University	Fish Biologist for Prineville District BLM 1991 – present.
<b>Ryan Franklin</b> <i>Physical Science Technician</i>	B.S. Geology, University of Oregon	Seasonal wilderness ranger (1995-1996) and seasonal hydrological technician (1997) for the USFS. Seasonal interpretive ranger (2001) for the BLM. Currently a seasonal physical science technician for the BLM. Duties include minerals planning and inventory of rock collecting sites.
<b>Ron Gregory</b> <i>Deschutes Resource Area Archaeologist</i>	B.A. and M.A. / Applied Anthropology. Oregon State University	Positions held as archaeologist with the USFS and BLM with responsibilities for locating, researching, and documenting historic properties and heritage resources and planning for their preservation and appropriate uses.
<b>Ron Halvorson</b> <i>Natural Resource Specialist – Botanist</i>	B.S. Animal Science, Cal Poly San Luis Obispo; M.S. Renewable Resources Management, University of Nevada, Reno	Range Conservationist BLM (1974 - 1984), District Botanist Prineville District BLM (1985 - present). Responsible for implementation of special status plant and Research Natural Area programs, and policy oversight of Area of Critical Environmental Concern program.

**Table 5-4. Interdisciplinary Team for Upper Deschutes Resource Management Plan**

<b>Name and Title</b>	<b>Education</b>	<b>Experience</b>
<b>Douglas D Kile</b> <i>GIS Coordinator</i> <i>UDRMP/ Deschutes</i> <i>Resource Area</i>	Various classes taken in quarter during the 1990s from Eastern Oregon and Central Oregon Community College. Associates Degree in Drafting (1982) from Treasure Valley CC	Coordinate and provide GIS analysis and cartographic needs for issue teams and resource area specialists. Previously employed as GIS assistant on the Prairie City Ranger District and Malheur National Forest Supervisors Office.
<b>Michelle McSwain</b> <i>Hydrologist</i>	Masters in Forest Hydrology- OSU/ BA in Geology-University of Wisconsin-Madison	District hydrologist for Vale District BLM 1987-1989; Zone Hydrologist for Willamette National Forest 1989-1997; Hydrologist for Prineville District BLM 1997-present. Duties include district watershed program lead, water quality, riparian, stream channel, and aquatic habitat management.
<b>Phil Paterno</b> <i>Appraiser/Realty</i> <i>Specialist</i>	B.S. Plant and Soil Science State Certified General Appraiser	Duties include the valuation of land and interests, and the processing of land exchanges, acquisitions, sales and other realty related cases.
<b>Teal Purrington</b> <i>Rangeland</i> <i>Management Specialist</i>	M.S. Rangeland Resources, Oregon State University B.A. Biology, University of California, Santa Cruz	In current job since 1991. Duties include managing livestock grazing and providing input on management of other public land uses to preserve and enhance forage and other rangeland resources.
<b>Sue Stewart</b> <i>Fire Ecologist</i>	M.S. Natural Resource Management, Fire Ecology, University of Idaho. B.S. Forest Management, Oregon State University.	Various Fire Mgmt positions with US Forest Service and BLM since 1987. Currently Fire Ecologist for Prineville BLM and Deschutes and Ochoco National Forests. Duties include broad scale planning and monitoring of fuels management activities.
<b>Lawrence C Thomas</b> <i>Environmental</i> <i>Protection Specialist</i>	B.S Soil Science and Biology (Cal Poly Pomona)	Soil Scientist USDI BIA 1975-1977, Soil Scientist USDI BLM 1977-1992, Environmental Protection Specialist USDI BLM 1992 to present.
<b>Michael Williams</b> <i>Writer/Editor</i>	BA, MA, PhD., Sociology. University of California, Santa Barbara	Assistant Professor of Sociology, University of Southern Maine 1976-1980, NPS Ranger, 1981-1990, Writer Editor, USFS/BLM, 1992 to present.
<b>Ron Wortman</b> <i>Realty Specialist</i>	B.S. Business and Cartography, Eastern Oregon College	Realty Specialist for Prineville District for nine years. Duties include preparation of sales, exchanges, recreation and public purposes applications, rights-of-way, and leases and permits.



# References

- Agee, J.K., 1993. Fire Ecology of Pacific Northwest Forests. Island Press. Washington D.C.
- Agee, J. K., Maruoka, K.R., 1994. Historical fire regimes of the Blue Mountains. BMNRI-TN-1. La Grande, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Blue Mountains Natural Resources Institute.
- Aikens, M.C., and Couture, M., 1991. The Great Basin. In: The First Oregonians, edited by Carolyn M. Buan and Richard Lewis, pp. 21-26. Oregon Council for the Humanities. Portland.
- Allen, B., 1987. Homesteading the High Desert. University of Utah Press, Salt Lake City.
- American Indian Resources Institute 1988. Indian Tribes as Sovereign Governments. AIRI Press, Oakland.
- Amstrup, S. C., 1980. A radio-collar for game birds. Journal of Wildlife Management 44:214-217.
- Anderson, W.E., Borman, M.M., and Krueger W.C., 1998. The Ecological Provinces of Oregon. Oregon Agricultural Experiment Station, SR 990.
- Arborgast, B.F., Knepper, D.H. Jr, and Langer, W.H., 2000. The human factor in mining reclamation: U.S. Geological Survey Circular 1191.
- Audette, A., 2003. Executive Director, Central Oregon Visitors Association. Personal Communication (telephone conversations with Nik Carlson, Environmental Science Associates on January 27, and May 1, 2003).
- Autenrieth, R.E., 1973. Sage grouse research in Idaho. Proceedings of Western States Sage Grouse Workshop 8: 51-52.
- Autenreith, R.E., 1981 Sage grouse management in Idaho. Idaho Department of Fish and Game Wildlife Bulletin No. 9. Boise, ID.
- Autenrieth, R. E., Molini, W. and Braun, C., 1982. Sage grouse management practices. West. States Sage Grouse Committee Technical Bulletin No. 1.
- Baker, M.B., Jr., 1998. Hydrology and watershed management in semi-arid grasslands. In: The Future of Arid Grasslands: Identifying issues, seeking solutions. USDA Forest Service General Technical Report RMRS-P-3.
- Barnett, J.K., and John A.C., 1994. Pre-laying nutrition of sage grouse hens in Oregon. Journal of Range Management.
- Barrett, S.W., Arno, S.F., and Menakis, J.P., 1997. Fire episodes in the Inland Northwest (1540-1940) based on fire history data. Gen. Tech. Rep. INT-GTR-370. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- Batterson, W.M. and Morse, W.B., 1948. Oregon sage grouse. Oregon Fauna Ser. 1, Oregon Game Commission, Portland.
- Bean, RW., 1941. Life history studies of the sage grouse (*Centrocercus urophasianus*) in Clark County, Idaho. M.S. Thesis. Utah State College, Logan.
- Beck, T.D.I., 1975. Attributes of a wintering population of sage grouse, North Park, Colorado. M.S. Thesis. Colorado State Univ., Ft. Collins.

- Beck, T.D.I. and Braun C.E., 1980. The strutting ground count: variation, traditionalism, management needs. *Proceedings Western Association of Fish and Wildlife Agencies* 60:558-566.
- Beckerton, P.R. and Middleton, L.A., 1982. Effects of dietary protein levels on ruffed grouse reproduction. *Journal of Wildlife Management* 46:569-579.
- Belnap, J. and Harper, K.T., 1995. Influence of Cryptobiotic Soil Crusts on Elemental Content of Tissue in Two Seed Plants. *Arid Soil Research and Rehabilitation* 9:107-115.
- Belnap, J., Rosentreter, R., Kaltenecker, J., Williams, J., Leonard, S., Luehring, P., and Eldridge, D., 2001. Biological Soil Crusts: Ecology and Management. USDI BLM NSTC Technical Reference 1730-2 Denver, Colorado.
- Belsky, J.A., 1996. Viewpoint: western juniper expansion: is it a threat to arid northwestern ecosystems? *Journal of Range Management* 49(1): 53-59.
- Benda, L.E., Miller, D., Bigelow, P., Andras, K. (In Press). Effects of post-wildfire erosion on channel environments, Boise River, Idaho. *Forest Ecology and Management*.
- Bergerud, A.T., 1970. Population dynamics of the willow ptarmigan *Lagopus lagopus alleni* L. in Newfoundland 1955 to 1965. *Oikos* 21:299-325.
- Berry, J.D. and Eng, R.L., 1985. Interseasonal movements and fidelity to seasonal use areas by female sage grouse. *Journal of Wildlife Management* 49(1):237-240.
- Bibby, C.J., Burgess, N.D. and Hill, D.A., 1992. *Bird Census Techniques*. Academic Press, Harcourt Brace and Company, San Diego.
- Bishop, D., 2003. President, Deschutes County Fairground Commission. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on February 4, 2003).
- Boggs, K., Hansen, P., Pfister, R., and Joy, J., 1990. Classification and management of riparian and wetland sites in northwestern Montana. Missoula, MT: University of Montana, School of Forestry, Montana Forest and Conservation Experiment Station, Montana Riparian Association. 217 p. Draft Version 1.
- Bohn, C. and J.C. Buckhouse. 1986. Effects of grazing management on streambanks. *Transactions of the North American Wildlife and Natural Resources Conf.* 51:265-271.
- Borman, M.M., 1995. Tri-State Juniper Workshop Synthesis. February 8-9, 1995, La Grande, OR.
- Bradley, A.F., Noste, N.V., and Fischer, W.C., 1991. Fire ecology of forests and woodlands in Utah. General Technical Report INT-287. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station.
- Braun, C.E., 1991. Distribution and status of sage grouse in Colorado. 17th Western sage and sharp-tailed grouse workshop. 24-26 July 1991, Pocatello, Idaho.
- 1994 Distribution and status of sage grouse in Colorado. *Rocky Mountain Wildlife Journal*.
- Braun, C.E., Britt, T., and Wallestad, R.O., 1977. Guidelines for maintenance of sage grouse habitats. *Wildlife Society Bulletin* 5:99-106.
- Braun, C.E., Connelly, J.W., Crawford, J.A., Kobriger, G.D., and Sands, A.R., 1994. Sage grouse biology /habitat (What do we need to know and why). In: Sage grouse and Columbian Sharp-tailed grouse workshop. Prairie chicken Technical Council. 25-28 July 1993, Fort Collins, CO.
- Brogan, P.F., 1964. East of the Cascades. Binford and Mort, Portland.



- Brogan, P.F., 1981. High and Mighty. High and Mighty: Select Sketches about the Deschutes Country, edited by Thomas Vaughan, pp. 1-11. Oregon Historical Society, Portland.
- Brooks, H.C., 1963. Quicksilver in Oregon. Oregon Dept. Geol. And Mineral Indus., Bull. 55.
- Brown, D.E, Black, G.L., McLean, G.D., and Petros, J.R., 1980. Preliminary geology and geothermal resource potential of the Powell Buttes area, OR: DOGAMI Open-File Report 0-80-8.
- Bunderson, D.R., 1968. Floodplain Use relatd to Stream Morphology and Fish Populations. J. Wildlife Management. 32:507-514.
- Burkhardt, W.J. and Tisdale, E.W., 1976. Causes of juniper invasion in southwestern Idaho. Ecology 57: 472-484.
- Bureau of Economic Analysis, 2003. Bureau of Economic Analysis, USDC. Regional Accounts Data. <http://www.bea.doc.gov/bea/regional/reis/default.cfm>
- Burleigh, G., 2003. Juniper Furniture Maker. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on January 24, 2003).
- Burns Paiute Tribe (Herbert Hawley, Tribal Chairman), 1992. Letter of communication to Marci Todd, dated September 28, 1992. Letter on file at the Bureau of Land Management, Prineville District.
- Call, M.W. and Maser, C., 1986. Wildlife habitats in managed rangelands-The great basin of Southeastern Oregon: Sage Grouse. General Technical Report PNW-187.
- Candfield, R., 1941. Application of the line interception method in sampling of range vegetation. Journal of Forestry 39:386-394.
- Central Oregon Collaborative Projects, 2003. <http://matrix.deschutes.org/commsol/index.cfm>
- Central Oregon Intergovernmental Council, 2002. Central Oregon Community Investment Plan (February 7, 2002).
- Circle, C., 2003. Deschutes County Treasurer's Office. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on April 30, 2003).
- City of Bend, 1998. *Bend Area General Plan*. First major update and review, November 1998, Bend, Oregon. <http://www.ci.bend.or.us/generalplan/genplanmainpage.htm>
- City of Redmond, 2001. *2020 Comprehensive Plan and Addendum*. Adopted by City Council May 22, 2001, Redmond, Oregon.
- Clark, K. and Clark, D., 1981. Pioneers of Deschutes Country. High and Mighty: Select Sketches about the Deschutes Country, edited by Thomas Vaughan, pp. 13-117. Oregon Historical Society, Portland.
- Clary, W.P., Shaw, N.L., Dudley, J.G., Saab, V.A., Kinney, J.W., and Smithman, L.C., 1996. Response of a depleted sagebrush-steppe riparian system to grazing control and woody plantings. USDA Forest Service Intermountain Research Station. Research Paper INT-RP-492. December 1996.
- Coe, U.C., 1996. *Frontier Doctor: Observations on Central Oregon and the Changing West*. Northwest Reprints, Oregon State University Press. Corvallis.
- Coffman Associates, 2002. La Pine Airport Feasibility Study. Prepared for Deschutes County, Oregon. Prepared by Coffman Associates, Inc. (March 2002).

- Collins, R., 2002. U.S. Forest Service, Deschutes and Ochoco National Forests. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on December 11, 2002).
- Community Planning Workshop, 2002. 2001 Upper Deschutes Resource Management Plan Social Values Survey. Prepared by Community Planning Workshop for the Bureau of Land Management Prineville Field Office (March 2002).
- Confederated Tribes of the Warm Springs Reservation of Oregon, 1992. Declaration of Sovereignty. Warm Springs. Pp. 1-2.
- Connelly, J.W., 1993. Renesting by sage grouse in Southeastern Idaho. *The Condor* 95:1041-1043.
- Connelly, J.W., Browsers, H.W., and Gates, R.J., 1988. Seasonal movements of sage grouse in Southeastern Idaho. *Journal of Wildlife Management* 52(1):116-122.
- Cook, W.L., Jr. and Hewlett, J.D., 1979. The Broad-Based Dip on Piedmont Woods Roads. *Southern Journal of Applied Forestry*. 3(3): 77-81.
- Copstead, R.L., Johansen, D.K., and Moll, J., 1998. Water / Road Interaction: Introduction to Surface Cross Drain. USDA Forest Service, San Dimas Technology and Development Program, San Dias, California. 9877 1806-SDTDC
- Couture, M.D., Ricks, M.F., and Housley, L., 1986. Foraging Behavior of a Contemporary Northern Great Basin Population. *Journal of California and Great Basin Anthropology* Vol. 8, No. 2, pp 150-160.
- Coville, F.V., 1897. Notes On The Plants Used By The Klamath Indians Of Oregon. In: Contributions From The U.S. National Herbarium, pp. 87-108, Vol. V, No. 2. U.S. Department of Agriculture. Division of Botany. Government Printing Office. Washington.
- Crane, M.F., 1982. Fire ecology of Rocky Mountain Region forest habitat types. Final Report Contract No. 43-83X9-1-884. Missoula, MT: U.S. Department of Agriculture, Forest Service, Region 1. 272 p. On file with: U.S. Department of Agriculture, Forest Service, Intermountain Research Station, Fire Sciences Laboratory, Missoula, MT.
- Crawford, J. A., 1982a. History of sage grouse in Oregon. *Oregon Wildlife* 1982(March):3-6.
- Crawford, J.A., 1982b. Factors affecting sage grouse harvest in Oregon. *The Wildlife Society Bulletin* Vol. 10 No. 4.
- Crawford, J.A., Gregg, M.A., Drut, M.S., and DeLon, A.K., 1992. Habitat use by sage grouse during the breeding season in Oregon. Final Report to The Bureau of Land Management, Oregon State University, Corvallis, OR.
- Crawford, J.A., and Delong, A.K., 1993. Habitat use and reproductive success of female sage grouse in relation to livestock grazing at Hart Mountain Antelope Refuge, Oregon. *Annual Report*.
- Crawford, J. A., and Lutz, R.S., 1985. Sage grouse population trends in Oregon, 1941-1983. *Murrelet* 66:69-74.
- Cude, C., 1999. Annual Report Oregon Water Quality Index. Oregon Water Quality Index Report for Deschutes and Hood Basins, Water Years 1986-1995. Oregon DEQ, Laboratory Division, Water Quality Monitoring Section.
- Cude, C., 1999. Oregon Water Quality Index Summary Report. Water Years 1990-1999. Oregon DEQ, Laboratory Division, Water Quality Monitoring Section.
- Daubenmire, R. F., 1959. A canopy-coverage method of vegetation analysis. *Northwest Science* 33:224-227

- Dean Runyon and Associates, 2002. Oregon Travel Impacts 1991-2001.
- DeBano, L.F., Neary, D.G., and Ffolliott, P.F., 1998. Fire's Effects on Ecosystems. John Wiley & Sons, Inc. 605 Third Avenue, New York, NY 10158-0012.
- Deschutes and Ochoco National Forests, 2003. Central Oregon Public Lands Section of Projects, Spring 2003 (April 10, 2003). <http://www.fs.fed.us/r6/centraloregon/manageinfo/nepa/sop/>
- Deschutes County, 2001. *Deschutes County Community Plan – Our Vision 2010*.
- Deschutes County, 2003. Deschutes County coordinated population forecast, 2000-2025.
- Deschutes County Community Development Department, 2003. *Deschutes County Coordinated Population Forecast, 2000-2025, Final Report* (February 2003).
- Deschutes County Environmental Health Division, U.S. Geological Survey, and Oregon Department of Environmental Quality, 1999. La Pine National On-Site Wastewater Treatment and Disposal Demonstration Project.
- Dixon, G.E., 2003. Essential FVS: a user's guide to the forest vegetation simulator. USDA Forest Service, Fort Collins, CO. 189p.
- Dobrowolski, J.P., 2000. Some hydrologic and related management concerns in juniper dominated watersheds. Juniper Woodlands of North America: Ecology, Management, and Processes. Expanded Abstracts. Smposia presented at the 53<sup>rd</sup> annual meetings of the Society for Range Management, Boise, ID. February 17, 2000. pp 19-24.
- Donoghue, E., and Haynes, R., 2002. Assessing the Viability and Adaptability of Oregon Communities. USDA Forest Service Pacific Northwest Research Station. General Technical Report PWW-GTR-549 (July 2002).
- Driscoll, R.S., 1964. Vegetation-soil units in the Central Oregon juniper zone. USDA Forest Service Pacific Northwest Forest and Range Experiment Station, PNW-19.
- Drut, M.S., 1994. Status of sage grouse with emphasis on populations in Oregon and Washington. Audubon Society of Portland.
- Drut, M.S., Crawford, J.A., and Gregg, M.A., 1994. Brood habitat use by sage grouse in Oregon. Great Basin Nat.
- Dunn, P. and Braun, C.E., 1986. Summer habitat use by adult female and juvenile sage grouse. Journal of Wildlife Management 50(2): 228-235.
- Dwire, K.A. and Kauffman, J.B. (In Press). Fire and riparian ecosystems in landscapes of the western USA. Forest Ecology and Management
- Eddleman, L.E., 1991. Biology and Ecology of Western Juniper. Lake County Natural Resources and Rangeland Mangement Conference. October 15, 1991. Lakeview, OR.
- Eddleman, L.E. and Miller, P.M., 1991. Potential impacts of western juniper on the hydrologic cycle. Symposium on Ecology and Management of Riparian Shrub Communities. Sun Valley, ID.
- Eddleman, L.E. Miller, P.M., Miller, R.F., and Dysart, P.L., 1994. Western juniper woodlands (of the Pacific Northwest): Science assessment. Walla Walla, WA: Interior Columbia Basin Ecosystem Management Project.
- Edminster, F.C. 1954 American Game Birds of Field and Forest. Castle Books, New York.

- Eldridge, D.J. and Rosentreter, R., 1999. Morphological Groups: a Framework for Monitoring Microphytic Crusts in Arid Landscapes. *Journal of Arid Environments* 41:11-25.
- Ellis, D.V., French, K., Hajda, Y., 1998. Traditional Cultural Properties Study. In: Final Technical Report of Cultural Resources Studies Pelton-Round Butte Hydroelectric Project, FERC No. 2030. Volume 1: Project Overview. Edited by Richard M. Pettigrew, pp. 7.1-7.41. Prepared for and Submitted by: The Confederated Tribes of Warm Springs and the Portland General Electric Company. Document on file at the Bureau of Land Management, Prineville District.
- Emmons, S. R., and Braun, C.E., 1984. Lek attendance of male sage grouse. *Journal of Wildlife Management* 48: 1023-1028.
- Eng, R.L., 1963. Observations on the breeding biology of male sage grouse. *Journal of Wildlife Management* 27: 841-846.
- Eng, R.L. and Schladweiler, P., 1972. Sage grouse winter movements and habitat use in central Montana. *Journal of Wildlife Management* 36: 141-146.
- Evans, C.C., 1986. The relationship of cattle grazing to sage grouse use of meadow habitat on the Sheldon National Wildlife Refuge. Masters Thesis.
- Evans, K. E., and Krebs, R.R., 1977. Avian Use of Livestock Watering Ponds in Western South Dakota. USDA Forest Service General Technical Report RM-35.
- Evans, R.A. and Young, J.A., 1985. Plant succession following control of western juniper (*Juniperous occidentalis*) with picloram. *Weed Science* 33:63-68.
- Fischer, R.A., Apa, A.D., Wakkinen, W.L., Reese, K.P, and Connelly, J.W., 1993. Nesting-area fidelity of sage grouse in Southeastern Idaho. *The Condor* 95: 1038-1041.
- Franklin, J.F., and Dyrness, C.T., 1973. Natural Vegetation of Oregon and Washington. USDA Forest Service General Technical Report PNW-8. Pacific Northwest Forest and Range Experiment Station.
- Fremd, T., Bestland, E.A., and Retallack, G.J., 1994. John Day Basin Paleontology Field Trip Guide and Road Log. For 1994 Society of Vertebrate Paleontology Annual Meeting.
- French, J., 2003. Executive Director, Bend Visitor and Convention Bureau. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on January 31, 2003).
- Freudenburg, W.R., Wilson, L.J., and O'Leary, D., 1998. Forty Years of Spotted Owls? A Longitudinal Analysis of Logging-Industry Job Losses. *Sociological Perspectives*, 41(1).
- Frewing-Runyon, L., 1995. Importance and dependency of the livestock industry on federal lands in the Columbia River Basin [draft]. Unpublished report on file with the Interior Columbia Basin Ecosystem Management Project. Walla Walla, Washington.
- Frewing-Runyon, L., 2003a. Former BLM Oregon State Economist. Personal communication (electronic mail to Mollie Chaudet, BLM Prineville District dated May 2, 2003).
- Frewing-Runyon, L., 2003b. Former BLM Oregon State Economist. Personal communication (electronic mail to Mollie Chaudet, BLM Prineville District dated May 8, 2003).
- Furniss, M.J., Flanagan, S.A., and McFadin, B., 2000. Hydrologically-Connected Roads: An Indicator of the Influence of Roads on Chronic Sedimentation, Surface Water Hydrology, and Exposure to Toxic Chemicals. In: Stream Notes, Stream Systems Technology Center, USDA Forest Service Rocky Mountain Research Station. July, 2000.

- Gannett, M.W., Lite, K.E., Jr., Morgan, D.S. and Collins, C.A., 2001. Ground-water hydrology of the upper Deschutes Basin. Oregon. US Geological Survey Water-Resources Investigation Report 00-4162.
- Gates, R.J., 1983. Sage grouse, lagomorph and Pronghorn use of a sagebrush grassland burn site on the Idaho National Engineering Laboratory. M.S. Thesis, Montana State University, Bozeman, MT.
- Gebert, K.M., Keegan, C.E., III, Willits, S., and Chase, A., 2002. Utilization of Oregon's Timber Harvest and Associated Direct Economic Effects, 1998. USDA Forest Service Pacific Northwest Research Station. General Technical Report PNW-GTR-534 (April 2002).
- Giesen, G.L., Schoenberg, T.L., and Braun, C.E., 1982. Methods for trapping sage grouse in Colorado. Wildlife Society Bulletin 10:224-231.
- Gill, R.B., 1965. Distribution and abundance of a population of sage grouse in North Park, Colorado. M.S. Thesis. Colorado State Univ., Fort Collins.
- Girard, G.L., 1935. Life history, habits, and food of the sage grouse, *Centrocercus urophasianus*. M.S. Thesis. Univ. Wyoming, Laramie.
- Girard, G.L., 1937. Life history, habits, and food of the sage grouse, *Centrocercus urophasianus*. Bonaparte. University of Wyoming Publication 3:1-56.
- Gonzales, R., 1998. Cross Drain Update. Publication 9877 1804—SDTDC. San Dimas, California: USDA Forest Service, San Dimas Technology Development Center. 14 p.
- Gray, G.M., 1967. An ecological study of sage grouse broods with reference to nesting, movements, food habits, and sagebrush strip spraying in the Medicine Lodge drainage, Clark County, Idaho. M.S. Thesis. Univ. of Idaho, Moscow.
- Gregg, Michael A. 1991 Use and selection of nesting habitat by sage grouse in Oregon. M.S. Thesis, Oregon State University, Corvallis, OR.
- Gregg, M.A., Crawford, J.A., Drut, M.S., and DeLong, A.K., 1994. Vegetative Cover and Predation of Sage Grouse Nests in Oregon. *Journal of Wildlife Management* 58(1):162-166.
- Gregory, R.L., 2001. Life in Railroad Logging Camps of the Shevlin-Hixon Company, 1916-1950. Anthropological Paper No. 12, Oregon State University Press, Corvallis.
- Group Mackenzie, 1999. Roberts Field Business Center Development Plan, Project #198381. Prepared by Group Mackenzie, Portland, Oregon (June 1999).
- Gullion, G.W., 1970. Factors influencing ruffed grouse populations. *Trans. North American Wildlife Natural Resources Conference* 35:93-105.
- Haeussler, S., and Coates, D., 1986. Autecological characteristics of selected species that compete with conifers in British Columbia: a literature review. Land Management Report No. 33. Victoria, BC: Ministry of Forests, Information Services Branch.
- Haeussler, S., Coates, D., and Mather, J., 1990. Autecology of common plants in British Columbia: A literature review. Economic and Regional Development Agreement FRDA Rep. 158. Victoria, BC: Forestry Canada, Pacific Forestry Centre; British Columbia Ministry of Forests, Research Branch.
- Hall, F., 1985. Wildlife habitats in managed rangelands- The Great Basin of southeast Oregon: Management practices and options. General Technical Report PNW - 189
- Hanes, R.C., 1995. Treaties, Spirituality, and Ecosystems: American Indian Interests in the Northern Intermontane Region of Western North American. U.S. Department of the Interior, Bureau of Land Management.



- Hanf, J.M., Schmidt, P.A., and Groshens, E.B., 1994. Sage grouse in the high desert of Central Oregon: results of a study, 1988-1993. U. S. Department of Interior, Bureau of Land Management Series P-SG-01, Prineville, OR.
- Hanssen, I., Ness, J., and Steen, J.B., 1982. Parental nutrition and chick production in captive willow ptarmigan (*Lagopus l. lagopus*). *Acta. Vet. Scand.* 23:528-538.
- Harris, C., McLaughlin, W., and Becker, D., 2000. Rural Communities in the Inland Northwest: An Assessment of Small Rural Communities in the Interior and Upper Columbia River Basins. USDA Forest Service and USDI Bureau of Land Management. General Technical Report PWW-GTR-477 (October 2000).
- Hawley, H. (Tribal Chairman, Burns Paiute Tribe), 1992. Letter of communication to Marci Todd, dated September 28, 1992. Letter on file at the Bureau of Land Management, Prineville District.
- Haynes, R.W., Graham, R.T., Quigley, T.M. (technical editors), 1996. A framework for ecosystem management in the Interior Columbia Basin and portions of the Klamath and Great Basins. Gen. Tech. Rep. PNW-GTR-374. Portland, OR; US Department of Agriculture, Forest Service, Pacific Northwest Research Station.
- HGE, 2002. Water and Wastewater Capital Facilities Plan for La Pine Special Sewer District and La Pine Water District to Provide Services to the La Pine New Neighborhood. Prepared for Deschutes County Community Development Department, Bend, Oregon. Prepared by HGE, Inc. Architects, Engineers, Surveyors & Planners (March 2002).
- Higby, L.W., 1969. A summary of the Longs Creek sagebrush control project. In: Proceedings of Biennial Western States Sage Grouse Workshop 6:164-168.
- Hirschl, T.A., and Summers, G.F., 1982. Cash transfers and the export base of small communities. *Rural Sociology*, 47.
- Hirschl, T.A., and Summers, G.F., 1984. Shifts in rural income: the implications of unearned income for rural community development. *Research in Rural Sociology and Development*, 2.
- Hobson Ferrarini Associates, Inc., 2000. Industry Overview of the Luxury Fractional and Private Residential Club. In association with George David, Realty Financial Resources, Inc. and John M. Schopfer, Resort Capital Resources, Inc. (October 2000).
- Holechek, J.L., 1991. Policy changes on federal rangelands: a perspective. An invited paper presented to National Public Lands Advisory Council November 1991, Golden Colorado.
- Holechek, J.L., 2001. Western Ranching at the Crossroads. *Rangelands* 23(1), February, 2001. p. 17-21.
- Holechek, J.L., Pieper, R.D., and Herbel, C.H., 1995. Range Management Principles and Practices, Second Edition. Prentice Hall, Inc. Upper Saddle River, New Jersey 07458.
- Hooper, P.R., Steele, W.K., Conrey, R.M., Smith, G.A., Anderson, J.L., Bailey, D.G., Beeson, M.H., Tolan, T.L., and Urbanczyk, K.M., 1993. The Prineville basalt, north-Central Oregon: *Oregon Geology* v. 55, no. 1, p. 3-12.
- Hopkins, et. al., 1992. Region 6 interim old-growth definitions. 1992. USDA Forest Service.
- Howard, J.L., 1997. In: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, June). Fire Effects Information System, [Online]. Available: <http://www.fs.fed.us/database/feis/> [June, 2003].
- Hunn, E.S., 1990. Nch'i-Wana: The Big River, Mid-Columbia Indians and Their Land. University of Washington Press. Seattle.

- Ives, J., 2003. Visitor Information Center Manager, Bend Visitor and Convention Bureau. Personal communication (conversation with Christina McElroy, State Economist, BLM on January 15, 2003).
- Jenni, D.A., and Hartzler, J.E., 1978. Attendance at a sage grouse lek; implications for spring censuses. *Journal of Wildlife Management* 42:46-52.
- Johansen, J.R., Ashley, J., and Rayburn, W.R., 1993. Effects of Range Fire on Soil Algal Crusts in Semiarid Shrub-steppe of the Lower Columbia Basin and Their Subsequent Recovery. *Great Basin Naturalist* 53:73-88.
- Johnson, K.A., 2000. In: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, June). Fire Effects Information System, [Online]. Available: <http://www.fs.fed.us/database/feis/> [June, 2003].
- Judson, D.H., Reynolds-Scanlon, S., and Popoff, C.L., 1999. Migrants to Oregon in the 1990's. Working Age, Near-Retirees, and Retirees Make Different Destination Choices. *Rural Development Perspectives*, 14(2) (August 1999).
- June, J.W., 1963. Western states sage grouse 1963 workshop. Western states grouse committee, 1962-1963. June 18, 19, and 20, 1963, Lima, MT. Wyoming Game and Fish Department.
- June, J.W., 1967. Guzzlers-man-made water holes for wildlife. *Wyoming Wildlife* 31(7):30-35.
- Kaltenecker, J.H., 1997. The Recovery of Microbiotic Crusts Following Post-fire Rehabilitation on Rangelands of the Wester Snake River Plain. Unpublished thesis, Boise State University, Boise, ID
- Kauffman, J.B., Cummings, D., Heider, C., Lytjen, D., and Otting, N., 2000. Riparian Vegetation Responses to Re-Watering and Cessation of Grazing, Mono Basin, California. In: American Water Resources Association Proceedings-International Conference on Riparian Ecology and Management in Multi-Use Watersheds. August 28-31, 2000 Portland, OR. Edited by Parker J. Wigington, Jr, and Robert L. Beschta.
- Kavanaugh, D., 2003. Oregon Economic and Community Development Department. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on May 2, 2003).
- Kesler, S.E., 1994. Mineral resources, economics, and the environment: Macmillan College Publishing Company.
- Klebenow, D.A., 1969a. Sage grouse nesting and brood habitat in Idaho. *Journal of Wildlife Management* 33:28-31
- Klebenow, D.A., 1969b. Sage grouse versus sagebrush control in Idaho. *Journal of Range Management* 23:396-400.
- Klebenow, D.A., 1982. Livestock grazing interactions with sage grouse. In: Proc. Wildlife Livestock Relationships Symposium, J.M. Peek and P.D. Dalke (eds.). Univ. Idaho, Forest, Wildlife, and Range Experiment Station, Moscow. pp.113-123.
- Klebenow, D.A., and Gray, G.M., 1968. Food habits of juvenile sage grouse. *Journal of Range Management* 21(2): 80-83.
- Knopf, F.L., Cannon, R.W., 1981. Structural resilience of a willow riparian community to changes in grazing practices. In: Proceedings of wildlife-livestock relationships symposium; 1981; Coeur d'Alene, ID. Moscow, ID; University of Idaho: 198-207.
- Kochenderfer, J.N., 1995. Using Open-Top Pipe Culverts to Control Surface Water on Steep Road Grades. Gen. Tech. Rep. NE-194. Radnor, Pennsylvania: USDA, Forest Service, Northeastern Forest Experiment Station. 7Ê p.
- Koniak, S. and Everett R.L., 1982. Seed reserves in soils of successional stages on pinyon woodlands. *Am. Midl. Nat.* 102:295-303.

- Korish, K., 2003. Duke Warner Realty, Bend, Oregon. Personal communication (conversation with Christina McElroy, State Economist, BLM on January 4, 2003).
- Kovalchik, B.L., and Elmore, W., 1991. Effects of cattle grazing systems on willow-dominated plant associates in Central Oregon. Presented at the Symposium on Ecology and Management of Riparian Shrub Communities, Sun Valley, ID, May 29-31, 1991.
- Krutilla, J.V., 1967. Conservation Reconsidered. *American Economic Review*, 57 (September 1967).
- Lack, D., 1954. The natural regulation of animal numbers. London, Oxford University Press.
- Lamb, B., March 5, 2001. Personal communication. Oregon Department of Environmental Quality.
- Langer, W.H., 2002. Managing and protecting aggregate resources: U.S. Geological Survey Open-File Report 02-415.
- Leach, H.R. and Hensley, A.L., 1954. The sage grouse in California with special reference to food habits. *California Fish and Game* 40:385-394.
- Lebow, C.G., Pettigrew, R.M., Silvermoon, J.M., Chance, D.H., Boyd, R., Hajada, Y., and Zenk, H., 1990. A Cultural Resource Overview for the 1990s. BLM Prineville District, Oregon. Cultural Resource Series No. 5. U.S. Department of the Interior, Bureau of Land Management.
- Lee, R., 2003. Deschutes County Economic Development Department. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on April 30, 2003).
- Leonard, R., 2003. Personal communication (telephone conversation with Nick Carlson, Environmental Science Associates on January 24, 2003).
- Leopold, L.B., 1994. A View of the River. Harvard University Press. Cambridge, Massachusetts.
- Liffman, R., Huntsinger, L., and Forero, L., 2000. To Ranch or Not to Ranch, Home on the Range, *Journal of Range Management* 53:362-370.
- Link, S.O., Ryan, B.D., Downs, J.L., Cadwell, L.L., Hawke, M.A., and Ponzetti, J., 2000. Lichens and Mosses on Shrub-steppe Soils in Southeastern Washington. *Northwest Science* 74:50-56.
- Liquori, M. and Jackson, C.R., 2001. Channel response from shrub dominated riparian communities and associated effects on salmonid habitat. *Journal of the American Water Resources Association*, Vol. 37, no. 6, pp. 1639-1652. Dec 2001.
- Lotan, J.E., Alexander, M.E., Arno, S.F. [and others] 1981. Effects of fire on flora: A state-of-knowledge review. National fire effects workshop; 1978 April 10-14; Denver, CO. Gen. Tech. Rep. WO-16. Washington, DC: U.S. Department of Agriculture, Forest Service.
- Luntz Research and the Land Trust Alliance, 1999. American Views on Land & Water Conservation (Summer 1999).
- MacDonald, L.H., Smart, A.W., and Wissmar, R.C., 1991. Monitoring guidelines to evaluate effects of forestry activities on streams in the Pacific Northwest and Alaska. US EPA, Region 10, Water Division, 1200 Sixth Ave., Seattle, WA 98101. EPA/910/9-91-001.
- Main, R., 2000. Overview of hydrology of the Deschutes basin. Report from, Oregon Water Resources web page: <http://www.wrd.state.or.us/programs/deschutes/0817presentations/hydrology.html>
- Marble, J.R. and Harper, K.T., 1989. Effect of Timing of Grazing on Soil-surface Cryptogamic Communities in Great Basin Low-shrub Desert: a Preliminary Report. *Great Basin Naturalist* 49:104-107.



- Marcouiller, D.W., and Green, G.P., 2000. Outdoor recreation and rural development. Pp. 33-50 in *National Parks and Rural Development*, Gary E. Machlis, Donald R. Field, and Walt H. Gardiner (eds.). Washington, D.C: Island Press.
- Marcouiller, D.W., Green, G.P., Deller, S.C., Sumathi, N.R., and Erkkila, D., 1996. Recreational Homes and Regional Develop- Amenities and Community Economic Development 75: A Case Study from the Upper Great Lakes States. Madison, Wisconsin: University of Wisconsin Extension, Report No. G3651.
- Martin, N.S., 1970. Sagebrush control related to habitat and sage grouse occurrence. *Journal of Wildlife Management* 34:313-320.
- Martin, R.E., 1978. Fire manipulation and effects in western juniper (*Juniperus occidentalis* Hook.). In: *Proceedings of the western juniper ecology and management workshop*; Martin, Robert E.; Dealy, J. Edward; Caraher, David L., eds. 1977 January; Bend, OR. General Technical Report. PNW-74. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station: 121-136.
- McArthur, L.L., 1982. *Oregon Geographic Names* (fifth edition). Oregon Historical Society, Portland.
- McCaffrey, B., 2003. BIAK Training Center. Personal communication (conversation with Christina McElroy, State Economist, BLM on January 15, 2003).
- McCune, B. and Rosentreter, R., 1995. *Field Key to Soil Lichens of Central and Eastern Oregon*. Unpublished report. Oregon State University, Corvallis.
- McGranahan, D.A., 1999. Natural Amenities Drive Rural Population Change. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 781.
- Memmott, K.L., Anderson, V.J., and Monsen, S.B., 1998. Seasonal Grazing Impact on Cryptogamic Crusts in a Cold Desert Ecosystem. *Journal of Range Management* 51:547-550.
- MIG, Inc., 2000. IMPLAN Input Output Model Data Sets for Deschutes and Crook Counties. Minnesota IMPLAN Group Inc. Stillwater, Minnesota.
- Miller, D., Luce, C., Benda, L.E. (In Press). Time and space scale and episodicity of physical disturbance in streams. *Forest Ecology and Management*.
- Miller, M.M. and Miller, J.W., 1976. Succession after wildfire in the North Cascades National Park complex. In: *Proceedings, annual Tall Timbers fire ecology conference: Pacific Northwest*; 1974 October 16-17; Portland, OR. No. 15. Tallahassee, FL: Tall Timbers Research Station: 71-83.
- Miller, R. and Rose, J., 1998. Pre- and post-settlement fire return intervals on Intermountain sagebrush steppe. In: *Annual report: Eastern Oregon Agricultural Research Center*. Corvallis, OR: Oregon State University, Agricultural Experiment Station: 16-17.
- Miller, R., Rose, J., Svejcar, T. [and others] 1995. Western juniper woodlands: 100 years of plant succession. In: *Desired future conditions for pinon-juniper ecosystems: Proceedings of the symposium*; Shaw, Douglas W.; Aldon, Earl F.; LoSapio, Carol (technical coordinators). 1994 August 8-12; Flagstaff, AZ. General Technical Report RM-258. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station : 5-8.
- Miller, R.F., Eddleman, L.E., and Angell, R.F., 1989. Effects of plant structure and composition on upland hydrologic cycles: juniper woodlands. In: *Practical Approaches to Riparian Resource Management, An Educational Workshop*. May 8-11, 1989. Billings, Montana. Edited by R.E. Gresswell, B.A. Barton, and J.L. Kershner.

- Miller R.F., and Wigand, P.E., 1994. Holocene changes in semiarid pinyon-juniper woodlands. *BioScience* Vol. 44 No. 7, July-August 1994. pp 465-474.
- Miller, R.F., Svejcar, T.J., and Rose, J.A., 2000. Impacts of Western Juniper on Plant Community Composition and Structure. *Journal of Range Management* 53:574-585.
- Miller, R.F., 2003. Fire Effects in Mountain, Wyoming, and Low Sagebrush Communities. Eastern Oregon Agricultural Research Center. Burns, OR [online] URL: <http://oregonstate.edu/dept/EOARC/researchhome/currentresearch/ecology/fireeffects.html>
- Moss, V.D. and Wellner, C.A., 1953. Aiding blister rust control by silvicultural measures in the western white pine type. Circular No. 919. Washington, DC: U.S. Department of Agriculture.
- Nelson, O.C., 1955. A field study of the sage grouse in southeastern Oregon with special reference to reproduction and survival. M.S. thesis. Oreg. State Coll., Corvallis.
- NFES 2224, 1992. Fire behavior field reference guide. National Wildfire Coordinating Group. Boise, ID.
- Oakleaf, R.J., 1971. Relationship of sage grouse to upland meadows in Nevada. M.S. Thesis. Univ. of Nevada, Reno.
- Oetting, A.C., 1997. Archaeological Investigations at the Central Oregon Training Site Near Redmond, Deschutes and Crook Counties, Oregon. Heritage Research Associates Report No. 196. Eugene.
- OECD (Organisation for Economic Co-operation and Development), 1994. The Contribution of Amenities to Rural Development. Paris, France.
- Ohman, Debra. 1999. Restructuring and well-being in the nonmetropolitan Pacific Northwest. *Growth and Change*, 30.
- Oregon Department of Administrative Services, 2003. Office of Economic Analysis. Long-term Population and Employment Forecast: through 2040. [www.oas.das.state.or.us/population.htm](http://www.oas.das.state.or.us/population.htm)
- Oregon Department of Forestry. 2003. Oregon Annual Timber Harvest Reports 1986-2001. [http://www.odf.state.or.us/DIVISIONS/resource\\_policy/resource\\_planning/Annual\\_Reports/Default.asp](http://www.odf.state.or.us/DIVISIONS/resource_policy/resource_planning/Annual_Reports/Default.asp)
- Oregon Department of Land Conservation and Development. undated. Oregon Statewide Planning Program. [www.lcd.state.or.us/fastpdfs/brochure.pdf](http://www.lcd.state.or.us/fastpdfs/brochure.pdf)
- Oregon Department of Geology and Mineral Industries, 1995. An economic analysis of construction aggregate markets and the results of a long-term forecasting model for Oregon.
- Oregon Department of Transportation, 1995. Oregon Department of Transportation. U.S. Highway 97 Corridor Strategy (Madras-California Border).
- Oregon Department of Transportation, 1998. Economic analysis of the aggregate industry for the Bend/Sisters/Redmond area.
- Oregon Department of Transportation, 1999. Bend/Sisters/Redmond area aggregate study alternatives analysis.
- Oregon Department of Transportation, 2002a. Oregon Department of Transportation. Interoffice Memos from Harlan Nale, P.E., to Mark Devoney, Region 4 Program and Planning Manager. Technical Memorandum #1, Existing Conditions during a Medium Event at the Deschutes County Fairgrounds (March 20, 2002); Technical Memorandum #2, Existing Conditions No-Build Analysis (April 12, 2002); Technical Memorandum #3, Analyze Short-term Improvements and Possible Modifications to Relieve both Inbound and Outbound Traffic Flow Congestion when Medium Events Occur at the Deschutes County Fairground

- (May 28, 2002 and June 12, 2002); and Technical Memorandum #4, 19<sup>th</sup> Street Extension and Proposed 4.0 and 2.5 Percent/Year Growth Rates (August 13, 2002).
- Oregon Department of Transportation, 2002b. Oregon Department of Transportation. *Yew Avenue to Deschutes Market Road Analysis: The Dalles-California Highway (US 97), MP 121.89 to MP 130.18*. December 2002.
- Oregon Economic and Community Development Department *et al.*, 2001. Central Oregon Area Profile. Economic Development for Central Oregon, Bend, Oregon.
- Oregon Economic and Community Development Department, 2000. Distressed Areas and Associated Index Values as of September 1, 2000., Salem, Oregon.
- Oregon Employment Department, 2001. 2002 Regional Economic Profile: Region 10, Crook, Deschutes, and Jefferson Counties (October 2001).
- Oregon Employment Department, 2003. Oregon Labor Market Information System (OLMIS), Current Employment by Industry. [http://www.qualityinfo.org/olmisj/CES?x=1&y=1&p\\_action=](http://www.qualityinfo.org/olmisj/CES?x=1&y=1&p_action=)
- Leisure and Hospitality Employment (webpage updated through April 2003). <http://www.qualityinfo.org/olmisj/CES?areacode=01000000&action=history&series=70000000&submit=Continue>
- Oregon Parks and Recreation Department, 2003. 2002-2007 Oregon State Comprehensive Outdoor Recreation Plan (SCORP) (January 2003).
- Oregon Parks and Recreation Department, undated. Oregon State Parks and Recreation Department, ATV Program. Oregon State University Study Assessing Off-highway Vehicle (OHV) Recreation in Oregon. Salem, Oregon (undated material received by Environmental Science Associates on January 31, 2003).
- Oregon Progress Board, 1997. Oregon Shines II: Updating Oregon's Strategic Plan, A Report to the People of Oregon. From the Oregon Progress Board and the Governor's Oregon Shines Task Force, Salem, Oregon (January 1997).
- Oregon State University Extension Service, 2003. Oregon Agricultural Information Network. <http://ludwig.oregonstate.edu/oain/>
- Orr, E.L., Orr, W.L., and Baldwin, E.M., 1992. Geology of Oregon, fourth edition. Kendall/Hunt. Dubuque IA.
- Otak, 2002. Summary of Buildable Land Needs Analysis for the Redmond UGB. Memorandum from Todd Chase and Scot Siegel, Otak, Inc. to Chuck McGraw, City of Redmond, October 28, 2002.
- Otak, 2003. Revised Summary of Buildable Land Needs Analysis for the Redmond UGB. Memorandum from Todd Chase and Scot Siegel, Otak Inc., to Chuck McGraw, City of Redmond, January 30, 2003.
- Parker, P.L. and King, T.F., 1994. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin #38. U. S. Printing Office.
- Patterson, R.L., 1952. The sage grouse in Wyoming. Sage Books, Denver.
- Pearson, L.C. and Rope, S.K., 1987. Lichens of the Idaho National Engineering Laboratory. Department of Energy/ID-12110. Radiological and Environmental Sciences Laboratory, US Department of Energy, Idaho Falls, Idaho.
- Peterson, B.E., 1980. Breeding and nesting ecology of female sage grouse in North Park, Colorado. M.S. Thesis, Colorado State Univ., Fort Collins.

- Peterson, J.G., 1970. The food habitats and summer distribution of juvenile sage grouse in central Montana. *Journal of Wildlife Management* 34:147-155.
- Pettigrew, R.M. (editor), 1998. Final Technical Report of Cultural Resources Studies Pelton-Round Butte Hydroelectric Project, FERC No. 2030. Volume 1: Project Overview, pp. 3.1-3.54. Prepared for and Submitted by: The Confederated Tribes of Warm Springs and the Portland General Electric Company.
- Pevar, S.L., 1992. The Rights of Indians and Tribes: The Basic American Civil Liberties Union Guide to Indian and Tribal Rights. Southern Illinois University Press, Carbondale and Edwardsville.
- Platts, W.S., 1986. Riparian –stream management. In: National range conference proceedings; November 6-8, 1985. Oklahoma City, OK. USDA: 70-74.
- Portland State University, 2003. Portland State University Center for Population Research and Census. [www.upa.pdx.edu.CPRC/about/index.html](http://www.upa.pdx.edu.CPRC/about/index.html)
- Pomeroy, J.A., Thomas, L., and Thomas, B., 1983. Interim Soil Survey: Report of the Brothers Area, Prineville, Oregon District. USDI Bureau of Land Management in cooperation with the USDA Soil Conservation Service and the Oregon Agricultural Experiment Station.
- Power, T.M., 1988. The Economic Pursuit of Quality. Armonk, New York: M.E. Sharpe, Inc.
- Preister, K., 2000. Preparing for Change in the High Desert of Central Oregon: Using Human Geographic Boundaries to Create Partnerships. Prepared by James Kent Associates and Social Ecology Associates for the Central Oregon Initiative of the Forest Service and Bureau of Land Management (July 2000).
- Preston, R.N., 1978. Early Oregon Atlas. Binford and Mort, Portland.
- Prichard, D., Krapf, R., Leonard, S., Staats, J., Anderson, J., Correll, C., Fogg, J., Gebhardt, K., and Mitchell, B., 1998. A User Guide to Assessing Proper Functioning Condition and the Supporting Science for Lotic Areas. USDI Bureau of Land Management, Technical Reference 1737-15.
- Pyrah, D.B., 1954. A preliminary study toward sage grouse management in Clark and Fremont counties based on seasonal movements. M.S. Thesis, University of Idaho, Moscow, ID.
- Quigley, T. M. and S. J. Arbelbide (technical editors)
- Quinsey, S.D., 1984. Fire and grazing effects in western juniper woodlands of Central Oregon. Thesis, University of Washington.
- Quitmeier, R., 2002. Community Development Director, City of Redmond. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on November 26, 2002).
- Rasmussen, D.I., and Griner, L.A., 1938. Life history and management studies of the sage grouse in Utah, with special reference to nesting and feeding habits. *Trans. North American Wildlife Conference* 3:852-864.
- Remington, T.E. and Braun, C.E., 1985. Sage grouse food selection in winter, North Park, CO. *Journal of Wildlife Management* 49(4):1055-1061.
- Retallack, G.J., Bestland, E.A., and Fremd, T.J., 1996. Reconstructions of Eocene and Oligocene plants and animals of Central Oregon: *Oregon Geology* v. 58, no. 3, p. 51-67.
- Reynolds, M., 2003. Deschutes County Tax Assessor's Office. Personal Communication (telephone conversation with Nik Carlson, Environmental Science Associates on April 30, 2003).

- Rich, T., 1985. Sage grouse population fluctuations: Evidence for a 10-year cycle. BLM Technical Bulletin 85-1. Boise, Idaho.
- Risk, P.H., 1994. "Interpretation: A Road to Creative Enlightenment". In: CRM Thematic Issue. Volume 17, No. 2. U.S. Department of the Interior National Park Service Cultural Resources.
- Robbins, W.G. 1997. Landscapes of Promise: The Oregon Story 1800-1940. University of Washington Press. Seattle.
- Rogers, G.E., 1964. Sage grouse investigations in Colorado. Colorado Game, Fish and Parks Department, Technical Publication No. 16 132pp.
- Rose, J.A., Eddleman, L.E., 1994. Ponderosa pine and understory growth following western juniper removal. Northwest Science. 68(2):79-85.
- Rosenblatt, R.A., 2001. U.S. Census Report Reflects Growing Latino Population, The Bulletin, Bend, Oregon.
- Rosentreter, R., 1986. "Compositional Patterns Within a Rabbitbrush (*Chrysothamnus*) Community of the Idaho Snake River Plain." Pages 273-277 In: Proceedings, Symposium on the Biology of *Artemisia* and *Chrysothamnus*. USDA Forest Service Intermountain Research Station General Technical Report INT-200.
- Rosgen, D., and Silvey, H.L., 1996. Applied River Morphology. Wildland Hydrology, Pagosa Springs, Colorado.
- Rothermel, R.C., 1983. How to predict the spread and intensity of forest and range fires. USDA GTR-INT-143. Ogden, UT.
- Rowe, H.I., Bartlett, E.T., and Swanson, L.E., Jr., 2001. Ranching motivations in 2 Colorado Counties. Journal of Range Management 54:314-321.
- Rowe, J. S., Scotter, G.W., 1973. Fire in the boreal forest. Quaternary Research 3: 444-464.
- Rudd, N., 2001. Summary of Monitoring Data for *Astragalus peckii*, 1992-2000. The Nature Conservancy, Oregon Field Office.
- Rural Development Initiatives, 2002. Draft Economic Development Action Plan for Crook County /Princeville Economic Summit. Facilitated by Rural Development Initiatives, Inc., Eugene, Oregon (June 2002).
- Savage, D.E., 1969. Relation of sage grouse to upland meadows in Nevada. Nev. Fish and Game Comm. Job Completion Rep. Project W-39-R-9, Job 12 Reno.
- Schoenberg, T.J., 1982. Sage grouse movements and habitat selection in North Park, Colorado. M.S. Thesis, Colorado State Univ., Fort Collins.
- Schwantes, C.A., 1989. The Pacific Northwest: An Interpretive History. University of Nebraska Press. Lincoln.
- Schmidt, K.M., Menakis, J.P., Hardy, C.C., Hann, W.J., and Bunnell, D.L., 2002. Development of coarse-scale spatial data for wildland fire and fuel management. Gen. Tech. Rep. RMRS-GTR-87. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 41 p.
- Severson, K.E., and Boldt, C.E., 1978. Cattle, wildlife, and Riparian Habitat in the Western Dakotas. Management and Use of Northern Plains Rangelands Symposium, Bismark, North Dakota, pp 94-103.
- Sherrod, D.R., Mastin, L.G., Scott, W.E., and Schilling, S.P., 1997a. Volcano hazards at Newberry volcano, Oregon: U.S. Geological Survey Open-File Report 97-513.
- Sherrod, D.R., Taylor, E.M., Ferns, M.L., Scott, W.E., Conrey, R.M., and Smith, G.A., 1997b. Geologic map of the Bend 30- by 60-minute quadrangle, Deschutes, Jefferson, Lane, Linn, and



- Crook Counties, Central Oregon: U.S. Geological Survey Miscellaneous Investigations Map, scale 1: 100,000.
- Sicard, K., 2001. Central Oregon: At the Beginning of the 21st Century. Oregon Employment Department, Salem, Oregon.
- Sicard, K., 2001. From "Poverty With a Views" to the Home of Oregon's Next Metropolitan Statistical Area. Oregon Employment Department, Salem, Oregon.
- Smith, G.A., Manchester, S. R., Ashwill, M., McIntosh, W. C., Conrey, R. M., 1998. Late Eocene-early Oligocene tectonism, volcanism, and floristic change near Gray Butte, Central Oregon: GSA Bulletin v. 110 no. 6, p. 759-778.
- Smith, V.K., 1987. Non-use values in benefit-cost analysis. Southern Economic Journal, 54(1).
- Sowder, J.E., and Mowat, E.L., 1965. Western juniper (*Juniperus occidentalis* Hook). In: Silvics of forest trees of the United States. H. A. Fowells, compiler. Agriculture Handbook 271. Washington, DC: U.S. Department of Agriculture, Forest Service: 223-225.
- Spier, L., 1930. Klamath Ethnography. In: University of California in American Archaeology and ethnology, edited by A.L. Kroeber and Robert H. Lowie, pp. 144-170. University of California Press
- Sporting Goods Manufacturing Association, 2001. Mountain Biking Participation Study 2001, SGMA International: Florida.
- St. Claire, L.L., Johansen, J.R., and Rushforth, S.R., 1993. Lichens of Soil Crust Communities in the Intermountain Area of the Western United States. Great Basin Naturalist 53:5-12.
- Steele, R., and Geier-Hayes, K., 1989. The Douglas-fir/ninebark habitat type in central Idaho: succession and management. General Technical Report INT-252. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station.
- Steele, R., and Geier-Hayes, K., 1993. The Douglas-fir/pinegrass habitat type in central Idaho: succession and management. General Technical Report INT-298. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station.
- Story, J.M., 1992. Biological Control of Weeds: Selective, Economical, and Safe. Western Wildlands 18(2):18-23.
- Tatko, A., 2001. Area Is a Shade More Diverse: Bend's Minority Population Small, but Growing. The Bulletin, April 1, 2001, Bend, Oregon.
- Tatko, A., 2001. Census: Area Is Younger and Older: Many Retirees Live In La Pine, Sunriver and Prineville. The Bulletin, May 22, 2001, Bend, Oregon.
- Taylor, G.H., 1993. Normal annual precipitation, State of Oregon. Oregon Climate Service map. Oregon State University, Corvallis, OR.
- Tesky, J.L., 1992. In: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, June). Fire Effects Information System, [Online]. Available: <http://www.fs.fed.us/database/feis/> [June, 2003].
- Trimble, S.W., and Mendel, A.C., 1995. The cow as a geomorphic agent-a critical review. Geomorphology. 13(1995): 233-253.
- Trueblood, R.W., 1954. The effect of grass reseeding in sagebrush lands on sage grouse populations. M.S. thesis. Utah State Univ., Logan.

- Tucker, T. and Leininger, W.C., 1990. Differences in riparian vegetation structure between grazed areas and exclosures. *Journal of Range Management* 43(4), July 1990, pp 295-299.
- Uchytel, R.J., 1989. *Alnus rhombifolia*. In: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, June). Fire Effects Information System, [Online]. Available: <http://www.fs.fed.us/database/feis/> [June, 2003].
- U.S. Census Bureau, 2001. U.S. Census Bureau, USDC, Economics and Statistics Administration. Profiles of General Demographic Characteristics: 2000 Census of Population and Housing (Oregon).
- USDA, Forest Service, 1996. Status of the Interior Columbia Basin: Summary of Scientific Findings. Gen. Tech. Rep. PNW-GTR-385. Portland, OR: U. S. Department of the Interior, Bureau of Land Management.
- USDA Forest Service, 1996. Upper Deschutes Wild and Scenic River. Record of Decision and Final Environmental Impact Statement. Deschutes National Forest. Bend, OR.
- USDA Forest Service, USDI Bureau of Land Management, 1997. An assessment of ecosystem components in the interior Columbia basin and portions of the Klamath and great basins. PNW-GTR-405.
- USDA Forest Service and USDI Bureau of Land Management, 1998. Interior Columbia Basin Ecosystem Management Project: U.S. Forest Service, USDA and Bureau of Land Management, USDI. Economic and Social Conditions of Communities: Economic and Social Characteristics of Interior Columbia Basin Communities and an Estimation of Effects on Communities from the Alternatives of the Eastside and Upper Columbia River Basin Draft Environmental Impact Statements. BLM/OR/WA/PT-98/006-1792.
- USDA Forest Service and USDI, Bureau of Land Management, 2000. Interior Columbia Basin Final Environmental Impact Statement, Proposed Decision.
- USDA Forest Service and USDI Bureau of Land Management, 2001. Law Enforcement Presence Increases on Public Lands. Ochoco and Deschutes National Forests and Prineville District BLM, Office of Communications. Press Release (June 21, 2001).
- USDA Natural Resources Conservation Service, 1992. Soil Survey of Upper Deschutes River Area, Oregon, including parts of Deschutes, Jefferson, and Klamath Counties.
- USDA, Natural Resources Conservation Service, 2001. Rangeland Soil Quality-Infiltration. Soil Quality Information Sheet. Rangeland Sheet 5. P.O. Box 2890, Washington, D.C. 20013.
- USDA, USDI, & EPA, 1999. Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Streams. May, 1999. USDA Forest Service, Pacific Northwest Region, Regional Office, Director of natural Resources, Portland, OR.
- USDI Bureau of Land Management, 1985. BLM Manual 9113-Roads.
- USDI Bureau of Land Management, 1976. Timber Management Final Environmental Impact Statement.
- USDI Bureau of Land Management, 1988. Status Report, Fisheries and Wildlife Program.
- USDI Bureau of Land Management, 1989. Brothers/LaPine Resource Management Plan, Record of Decision. BLM-OR-ES-89-14-2410.
- USDI Bureau of Land Management, 1991. Vegetation treatment on BLM lands in thirteen western states final environmental impact statement. BLM-WY-ES-91-035-4320.
- USDI Bureau of Land Management, 1992. Fish and Wildlife 2000: Upland Game Bird Habitat Management. BLM-ID-PT-92-007-4351.

USDI Bureau of Land Management, Oregon State Office, 1993. Exploring Oregon's Past - A Teacher's Activity Guide for Fourth through Seventh Grade.

USDI Bureau of Land Management, 1994. Prineville District Integrated Weed Management. EA# OR-053-3-062.

USDI Bureau of Land Management and Bureau of Reclamation, 1992. Lower Crooked River, Chimney Rock Segment Management Plan and Environmental Assessment. Prineville District, BLM. Prineville OR.

USDI Bureau of Land Management, USDA Forest Service, Oregon State Parks and Recreation Department, 1992. Middle Deschutes/Lower Crooked Wild and Scenic Rivers' Management Plan.

USDI Bureau of Land Management, 2000. "Strategic Paper on Cultural Resources At Risk". Paper on file with BLM Prineville District.

USDI Bureau of Land Management, 2001a. Analysis of the Management Situation (AMS) for the Upper Deschutes Resource Management Plan and Environmental Impact Statement RMP/EIS. Prepared by Prineville District Office, Prineville, Oregon. BLM/OR/WA/PL-01/032-1792.

USDI Bureau of Land Management, 2001b. BLM Facts: Oregon and Washington 2001. BLM/OR/WA/GI-02/040-1792.

USDI Bureau of Land Management, 2002. Instruction Memorandum No. 2002-167 on Social and Economic Analysis for Land Use Planning (May 8, 2002).

USDI Bureau of Land Management and the Department of Energy, 2003. Assessing the Potential for Renewable Energy on Public Lands. National Renewable Energy Laboratory. (NREL)

USDI Fish and Wildlife Service, 2001. National Wetlands Inventory. Web site: <http://www.nwi.fws.gov>.

USDI Geological Survey (USGS), 1999. USGS Programs in Oregon. USGS On-line Fact Sheet. Fact Sheet FS-038-99.

USDI Geological Survey (USGS), 2002. An overview of production of specific U.S. gemstones. U.S. Bureau of Mines Special Publication 14-95. <http://minerals.usgs.gov/minerals/pubs/commodity/gemstones/sp14-95/>

USDI, 2002. U.S. Department of Interior, Fish and Wildlife Service and U.S. Department of Commerce, U.S. Census Bureau. 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

USDI National Park Service, 2002. Wild and Scenic River System, Deschutes River, Oregon. [www.nps.gov/rivers/wsr-deschutes.html](http://www.nps.gov/rivers/wsr-deschutes.html) (web page updated November 22, 2002).

Vaughn, T., editor, 1981. High and Mighty: Select Sketches about the Deschutes Country, pp. 1-11. Oregon Historical Society, Portland.

Wakimoto, R.H. and Willard, E.E., 1991. Monitoring post-fire vegetation recovery in ponderosa pine and sedge meadow communities in Glacier National Park, NW Montana. Research Joint Venture Agreement INT-89441. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 17 p. Progress Report.

Wallestad, R.O., 1971. Summer movements and habitat use by sage grouse broods in central Montana. Journal of Wildlife Management 35:129-136.

Wallestad, R.O., 1975a. Life history and habitat requirements of sage grouse in central Montana. Montana Department of Fish and Game, Helena.

Wallestad, R.O., 1975b. Male sage grouse responses to sagebrush treatment. Journal of Wildlife Management 39: 482-484.



- Wallestad, R.O., and Pyrah, D.B., 1974. Movement and nesting of sage grouse hens in central Montana. *Journal of Wildlife Management* 38:630-633.
- Wallestad, R. and Schladweiler, P., 1974. Breeding season movements and habitat selection of male sage grouse. *Journal of Wildlife Management* 38(4):634-637.
- Warren, S.D., Blackburn, W.H., and Taylor, C.A., Jr., 1986a. Effects of season and stage of rotation cycle on hydrologic condition of rangeland under intensive rotation grazing. *Journal of Range Management*, 39 (6), November 1986.
- Warren, S.D., Thurow, T.L., Blackburn, W.H., and Garza, N.E., 1986b. The influence of livestock trampling under intensive rotation grazing on soil hydrologic characteristics. *Journal of Range Management* 39 (6), November 1986.
- Warrick, B., 2003. President, American Lives, Inc., Real Estate Market Research, Oakland, CA. Personal communication (telephone conversation with Nik Carlson, Environmental Science Associates on April 30, 2003).
- Watson, A. and Moss, R., 1979. Population cycles in the Tetraonidae. *Grn. Fenn.* 56:87-109.
- Welch, B.L., Wagstaff, F.J., and Roberson, J.A., 1991. Preference of wintering sage grouse for big sagebrush. *Journal of Range Management* 44(5):462-465.
- Wemple, B.C., Jones, J.A., and Grant, G., 1996. Channel network extension by logging roads in two basins, western Cascades, Oregon. *Water Resources Bulletin* 32(6): 1195-1207.
- Willis, M.J., Keister G.P., Jr., Immel, D.A., Jones, D.M., Powell R.M., and Durbin, K.R., 1993. Sage Grouse in Oregon. Oregon Department of Fish and Wildlife Research Report No. 18. Portland, OR.
- Wondzell, S.M. and King, J. (In Press). Post-fire erosional processes: In the Pacific Northwest and Rocky Mountain region. *Forest Ecology and Management*.
- Wright, H.A., and Bailey, A.W., 1982. Fire ecology: United States and Southern Canada. John Wiley & Sons, New York, NY.
- Zasada, J., 1986. Natural regeneration of trees and tall shrubs on forest sites in interior Alaska. In: *Forest ecosystems in the Alaska taiga: A synthesis of structure and function*. Van Cleve, K.; Chapin, F. S., III; Flanagan, P. W.; [and others], editors. New York: Springer-Verlag: 44-73.
- Zucker, J., Hummel, K., and Hogfoss, B., 1983. Oregon Indians: Culture, History and Current Affairs, an Atlas and Introduction. Western Imprints, the press of the Oregon Historical Society. Portland.



# Index

- ACECs 10, 26, 38, 39, 47-49, 67, 78, 80, 84, 91, 104, 118, 120, 129, 148, 155, 165, 172, 181, 189, 197, 214.
- Alfalfa Pond 98, 203, 204
- Allotment categorization 294
- Allotment evaluation 51, 52, 295
- Badlands WSA 11, 40, 47, 50, 53, 70, 88, 89, 115, 132, 148, 165, 167, 182, 201, 203, 204, 260, 261, 271, 287, 288, 303, 304, 307, 311, 367, 416, 432
- Best Management Practices (BMPs) 87, 345
- Caves (FRCPA) 15, 56, 57, 58
- Communities at Risk 285, 286, 318, 419, 423
- Crooked River Ranch 73, 94, 96, 116, 135, 169, 207, 269, 270, 286, 288, 289, 304, 307, 309, 316, 318, 494, 532, 534, 595
- Deschutes County 3, 5, 20, 21, 101, 149, 199, 226-234, 249, 283, 292, 296, 297, 300, 306, 309, 312, 316, 456, 509, 512, 122, 124, 127, 548, 550, 551, 554, 560, 561, 569, 583, 593-595
- Endangered Species 3, 4, 8, 22, 37, 44, 58, 247, 254-257, 275, 326, 329
- Forest Products 53, 69, 86, 87, 112, 131, 232, 299-301, 352, 551, 552, 558, 563, 575, 590
- Forestland 53, 69, 235, 300, 332, 424
- Fragmentation 4, 20, 36, 94, 95, 205, 257, 351, 353, 358, 375, 388, 392, 397, 435, 449, 481, 498, 514, 517, 519, 523, 524
- Jefferson County 5, 226, 316, 594
- Klamath County 5, 226, 300, 595
- Leasable minerals 52, 68, 214, 297, 355, 450, 451, 457, 458, 547, 550, 565
- Locatable minerals 49, 52, 68, 214, 296, 355, 449-451, 453, 457, 458, 547, 550, 557, 562, 565
- Lodgepole Pine 7, 24, 35, 75, 103, 119, 120, 131, 139, 156, 236, 242-246, 248, 249, 250, 253, 254, 260, 270, 273, 300, 328, 338, 339, 342, 343, 3521, 357, 376
- Mayfield Pond 56, 64, 84, 93, 98, 110, 127, 133, 146, 153, 163, 171, 179, 195, 203, 204, 209, 266, 268, 273, 275, 280, 304
- Mechanized 71, 72, 80, 81, 132, 150, 167, 168, 181, 182, 183, 307, 334, 336, 337, 339, 340, 341, 344, 345, 347, 348, 421, 433, 460, 474, 487, 498, 502, 544, 546
- Millican Road 21, 93, 95, 168, 199, 204, 240, 290, 302, 309, 318, 504
- Mineral materials 3, 12, 48, 85, 118, 138, 149, 155, 172, 187, 296, 450, 451-453, 455-457, 523, 524, 547.
- Minerals 12, 41, 52, 54, 68, 85, 112, 131, 149, 166, 181, 197, 214, 296, 355, 449, 458, 550, 557, 573
- Mountain Biking 8, 13, 15, 16, 27, 70, 72, 79, 114, 116, 132, 135, 150, 167, 182, 183, 199, 200-203, 206, 207, 288, 291, 308, 311, 322, 339, 340, 348, 351, 474, 476, 480, 487, 495, 500, 502, 555, 614
- Noxious weeds 4, 7, 23, 24, 31, 44, 52, 57, 85, 238, 245, 250-252, 291, 327, 330, 331, 332, 333, 335, 340, 347, 354, 452, 453, 456, 458, 459, 516, 519, 520, 596
- Noxious Weeds 4, 7, 23, 24, 31, 44, 52, 57, 85, 238, 245, 250-252, 291, 327, 330-333, 335, 340, 347, 354, 452, 453, 456, 458, 459, 516, 519, 520, 596
- Old-Growth Juniper 7, 24, 34, 48, 75, 103, 120, 129, 165, 188, 213, 236, 240, 256, 261, 328, 332, 336, 355, 432, 436
- Oregon Department of Fish and Wildlife 56, 58, 76, 256-275, 352, 360, 370, 531
- Oregon Parks and Recreation Department 53, 532
- Permit relinquishment 215, 443, 448, 573
- Ponderosa Pine 24, 34, 35, 75, 103, 112, 119, 120, 131, 139, 156, 213, 236, 242-245, 328, 331, 333, 338, 339, 341-343, 357, 3689, 376, 423, 551
- Prescribed Fire/Burn 34, 45, 48, 49, 66-68, 75, 76, 78, 84, 102, 103, 118, 120, 138, 155, 172, 181, 197, 198, 213, 236, 239, 240, 259, 291, 301, 330, 331, 333, 335, 336, 339, 341-347, 356, 405, 419-424, 427, 428, 516, 547, 549, 551, 562, 571, 576
- Redmond 3, 5, 17, 19, 23, 39, 54, 67, 74, 85, 107, 113, 116, 118, 136, 137, 139, 153, 155, 171, 182, 185, 208, 209, 219, 225-227, 229, 230, 234, 252, 267, 286, 293, 296, 309, 311, 312, 313, 317, 507-515, 518, 521-528, 548, 560, 561, 564, 566-569, 577, 580-582
- Reynolds Pond 98, 133, 181, 182, 189, 203, 204, 273, 274, 280, 304
- Riparian 3, 9, 11, 25, 44, 47, 56, 66, 77, 121, 181, 236, 245, 253, 278, 279, 402-417
- Rockhounding 48, 54, 86, 130, 145, 152, 165, 169, 181, 197, 310, 450-460
- Sagebrush 76, 103, 236, 237-244, 257-261, 266-279, 271, 279, 284, 285, 336, 354, 484, 488, 493, 496, 499
- Soil Disturbance 249, 336, 337, 346, 517, 523, 524
- Special Forest and Range Products 12, 79, 87, 302, 339, 551
- Special Recreation Permit 16, 54, 80, 81, 97, 200, 365, 371, 433, 469, 471, 475, 479, 483, 487, 491, 495, 498, 545, 562
- Special Status Species 46, 57, 58, 247, 252, 259, 329, 359
- Standards for Rangeland Health 4, 49, 50, 51, 76, 83, 129, 165, 334, 348, 352, 440, 442,
- Steelhead Falls WSA 11, 50, 53, 69, 88, 90, 200, 274, 278, 303, 304, 307, 321, 356, 466, 468, 471, 474, 475, 543

Threatened Species	255, 433
Timber Harvest	9, 46, 69, 231, 243, 265, 270, 287, 300, 333, 339, 342, 343, 354, 368 421, 551, 563, 575, 576
Visual Resource Management Class	11, 13, 27, 88, 421, 431, 464, 466, 514, 514
West Butte Road	21, 183, 205, 312, 476, 481, 482, 489, 594
Wildland Fire	9, 25, 78, 236, 285, 286, 418-421, 424, 425, 427, 428, 430, 547
Wildland Urban Interface (WUI)	9, 76, 102, 118, 138, 155, 172, 187, 213, 285, 286, 419, 420, 421, 424, 425, 427, 248, 430, 547



**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**  
Prineville District Office  
3050 N.E. 3rd Street  
Prineville, Oregon 97754

**OFFICIAL BUSINESS**  
PENALTY FOR PRIVATE USE, \$300

**PRIORITY MAIL  
POSTAGE & FEES PAID  
Bureau of Land Management  
Permit No. G-76**

***Draft***  
Upper Deschutes Resource Management Plan  
and Environmental Impact Statement  
*Volume 2 - Chapters 1,2,3,4,5*